

THEME: *Funding*

Revolving Loan Fund/Green Revolving Fund/Energy Reserve Fund

- “\$5M revolving loan fund and WSU was actually one of the first public institutions that implemented one of those revolving loan funds back in 2008, 2009 to finance all of these projects. So we borrow from the fund, we invest in these projects, we save money on our utility bills. We pay off that debt with 3% interest to the university and then we reinvest in our next suite of projects for the year” - J. Bodine, Sustainability Manager, Weber
- “No, we have no issues with funding. And the reason why we don't is because we created that revolving loan fund from the very beginning” - J. Bodine, Sustainability Manager, Weber
- “So it's the university investing in itself, paying itself interest, but paying itself interest at a higher rate than it would've achieved on the market. And so no we don't have any problems with financing these projects because we borrow from this fund. We invest in the projects. We save money on the utility bills...” - J. Bodine, Sustainability Manager, Weber
- “So initially we borrowed \$5M from basically ourselves for the university. That included interest and we said we're going to pay this back with interest. And we're going to pay it back quickly” - K. Myers, Student Sustainability Communications Coordinator, Weber
- “We have a green revolving fund...where we get \$1M a year and the savings from that goes back to replenish the fund. It turns out the fund was originally seeded at half a million dollars and then it grew. And then when it got to \$1M they said that's it, the extra savings is going to go back to the university. So we use that to implement energy and water conservation projects. And the savings from those projects go back into the funds until we hit a million bucks and that's the cap for each year.” - Carol Dollard, CSU
- “And so we're asking for money over and above the \$1M they give us a year for our energy, we call it the ERF fund, that's our green revolving fund. Energy Reserve Fund, that's what it stands for.” - Carol Dollard, CSU
- “But when we got some mechanisms, it used to be we'd come up with projects and then we'd just ask for money right. So things like the ERF fund and some of those things got institutionalized.” - Carol Dollard, CSU
- “And it started with I think for the first 5 years, Carol and a group of people in facilities were given \$500,000 to do energy efficiency improvements. And that happened for 5 years and with each project that they invested in, that they chose to do then the utility savings from that was returned back into that fund. So that's a revolving fund....You're investing those dollars each year. And then the next year you get to... we were given that money every year for 5 years. So each of those 5 years in a row we got a new \$500,000. Let's say the first year we got \$500,000 and we did some efficiency projects and then some of those projects paid back through savings, so maybe we had let's just say we had \$50,000 of utility savings, so then the next year in year 2 we had \$550,000 to do projects with, right? Because we got the \$500,000 plus the \$50,000 in savings from year 1. Well let's say in year 2 we saved another \$50,000 so then in year 3 we had \$600,000 to use. Our \$500,000 plus the \$50,000 plus the \$50,000 so by year 5, year 6, we had \$1M.” - Stacey Baumgarn, CSU
- “Revolving funds are really powerful tools for investing in the campus. And then...it doesn't have to last forever. I mean the funding from the administration side doesn't have

to last every year because you're going to do projects that are going to save money. And our ROI, our return on investment on an annual basis is right around 20% a year.” - Stacey Baumgarn, CSU

- “One of the things that we use in our green revolving fund is we allocate, I don't know if it's been between \$30,000 and \$50,000 a year to our folks that maintain the steam system....It's just so important but in their budget alone they didn't have the money to do it.” - Stacey Baumgarn, CSU
- “In FY12, the Vice President of University Operations developed the Energy Reserve Fund (ERF). The fund was seeded with one-time money of \$500,000/year for the first 5 years. In addition, savings from projects implemented with these funds return to the ERF in subsequent years. As a result, once the seed money ran out at the end of FY16, the fund was self-sustaining with annual allocations of savings from previous projects. The Energy Team in Facilities Management develops a project list for the ERF each year. A subcommittee of the Presidents Sustainability Commission also reviews the list of projects each year.” (CSU, 17)

Savings/efficiency projects

- “So from the time that we started working on these projects back in 2009 until now we have saved the university over \$15M in utility costs” - J. Bodine, Sustainability Manager, Weber
- “So we not only implement all of these efficiency projects but we process every rebate with the utility. And then use that money as well to finance a lot of the positions in our office. And also help pay for some additional projects” - J. Bodine, Sustainability Manager, Weber
- “any future projects that they saved money with could be reinvested into future projects.” - K. Myers, Student Sustainability Communications Coordinator, Weber
- “So far we've saved about \$13.6M since 2008. Yeah it's been really great. And we've been utilizing those funds, so I don't think we have a cap” - K. Myers, Student Sustainability Communications Coordinator, Weber
- “I mean, we could go 2% percent too if we want it or just go 1%, but the beauty of it is, we're making money so there's no losers in it” - Steve Nabor, CFO, Weber
- “Because they have to display those energy savings in the energy savings, so, we have money available in that budget to pay for those projects” - Steve Nabor, CFO, Weber
- “You know like if I have access to money to do an energy conservation project, I will send some of those resources there way and hope that in return part of what happens is they circle back at some point and say oh hey we decided to invest some of those savings in XYZ sustainability work” - Eva Rocke, Sustainability Director, UM
- “The thing is that's really cool is you look at it, those people pay for their job about 3 times over every year. So it's not a hard investment except for the first year. You know, after that you're realizing savings that are way more than the salaries of those people” - Carol Dollard, CSU
- “We're operating from the money from the savings of the projects that we implemented in the prior years. So now there's not... new money that the administration has to put towards it. We're just recycling money from savings.” - Stacey Baumgarn, CSU
- “So you get this huge backlog of things that you need to fix....Institutions need a lot [of] money just to do some deferred maintenance and to make things that you already have

work better. And then can we take it a step further and do things for energy efficiency.” - Stacey Baumgarn, CSU

Taxes and student fees

- “I think we will definitely implement a tax on our parking permits to pay for all the carbon offsets we're going to have to purchase to offset all those commuting emissions” - J. Bodine, Sustainability Manager, Weber
- “If the administration supports allocating student fees to sustainability, it can be a great way to involve students more directly in sustainability programs and foster new collaborations between students, faculty, and staff.” (USU, 73).
- “There are a growing number of tax incentives and grants available from the federal government as well. One provision in the Higher Education Opportunity Act of 2008 includes \$50 million in grants for 25 to 200 sustainability projects per year.” (USU, 75).
- “Public colleges and universities that are tax exempt can take advantage of the CBTD (Commercial Building Tax Deduction) by passing through the tax deduction to the commercial project designers” (USU, 75).

Funding challenges/scarcity

- “Funding for all of our sustainability work is pretty piecemeal from wherever we can get it” - Eva Rocke, Sustainability Director, UM
- “So and even now I would say that part of the... creativity and finagling of my job is that it's my responsibility to kind of scavenge around and like find pots of money for sustainability projects” - Eva Rocke, Sustainability Director, UM
- “But we do it in smaller pieces. That's why the work is slower, that's why we're not carbon neutral by 2020 because we haven't been willing to invest millions” - Eva Rocke, Sustainability Director, UM
- “Support via funding at UM is sort of everyone's anxiety so I don't think anything is well funded right now at UM” - P. McDonough, Program Coordinator for the Climate Change Studies Program, UM
- “Funding is a hard thing for anything on campus; it's really difficult. Some people do it through programs called performance contracting. And that's where an outside entity, a private firm comes in and implements projects on your campus, but then they get to keep the savings until they get paid back for their original investment. So essentially the university keeps paying the same utility bills, the equivalent of the same utility bills for like 10 years into the future, because the company that installed the equipment is taking the savings as payment right...And that's reasonable but the reality is if you can figure out a way to fund them internally, and if you had the staffing to manage them. That's one thing people have always said why did they cap your fund at \$1M...we said if you gave us more money than that we would need a staff to help manage it...so it is not without financial burden.” - Carol Dollard, CSU

(COVID) budget cuts

- “Money is always tight at university and right now with COVID we always talk about COVID budgets. It's going to be really hard because the state funding too is going to be less because the tax revenues are down so much because people aren't buying stuff. This is a hard year to do new initiatives.” - Carol Dollard, CSU

- “And there has been some things like the story I told you about the airline offsets. We have not been successful in that, because basically the money stays within the university. The departments that travel it will raise their cost of travel. And that's just... right now, everybody's budgets are getting cut” - Carol Dollard, CSU
- “ We received the funding right before Covid and I think it might have been a little bit of a different story if this had come after that because there's been a lot of financial concern about how that's going to impact budgets and whatnot.” - Zac Cook, USU

Cost of carbon/change mindset

- “We have. I think what we probably had the hardest time, I would say... the minds... the shift in the mindset of looking at carbon having a cost has been the biggest issue. If we have a large capital project that economically is on the cost side of things, makes sense, I feel like we've been very successful at getting capital for those types of projects. Where we still are in this shift of mindset of looking at the actual costs of carbon and factoring that into our economic equation.” - Zac Cook, USU

Misc

- “I had a lot of cash in the bank. They needed it. Uh, make more interest, then I'll make it more interest than I can get in the market. They have savings, they justify savings. I pay the loan off of the utility account. Maybe it was just the people that we had at the time that collided in the right angles of things. But that esco I mean, really, the esco is kind of the model that we looked at. But we said they're screwing us over...they're making money on the construction, and they're stringing out this payback period. It's too expensive, so each shrug, all the things we did shrug that payback period” - Steve Nabor, CFO, Weber
- “Our state has I think a revolving loan budget of some sort, our utility manager and energy managers would be more familiar with it. But I think we've used that on our statewide campuses because our Logan Campus is our main campus. We are a land grant university so we have statewide other locations. And they have sometimes different funding than the main campus. And then on the main campus we also as part of the plan got to an agreement where savings from projects could be funneled back into new projects. So internally we can take savings and then fund new things. And that all works for energy. And then I think we've had more funding issues outside of that. I guess I should also say renewables. We did get a little bit extra from the president as a part of this process that if we were currently doing a... coalition of partners and we're going to do a RFP for a power purchase agreement. And I don't know where that's going yet, but we do have some funding in case that ends up being more costly than our alternatives. I think some of the other things like the academic side, trainings for faculty or students or things like that, those funding sources are a little more hit or miss. There are some that are in place. Like our student fee... for a grant program that students can apply for that exists but I don't think we have a set funding pot for stuff specifically on the academic side, not just engagement activities or student grants.” - Alexi Lamm, USU
- Energy conservation measures identified by the audit include equipment upgrades, stream trap replacements, ventilation changes, and improvements to building envelopes in many of the same buildings previously listed under the lighting project. Funding for these projects was received in 2009 through the state of Montana’s Long Range Building Program in the amount of roughly \$1,800,000. The resulting electricity savings is

estimated at 492,000 kWh per year and natural gas for steam at 14,400 MMBTU annually. Together, the resulting GHG emission reduction is estimated to be 960 MT eCO₂ annually and 29,000 MT eCO₂ over the life of the project. - UM CAP

Funding unidentified/uncertain

- Not all of the emission reduction strategies in the diverse portfolio identified are within the funding ability of the University. Overall success of the plan is dependent on obtaining external funding for a few strategies with large emissions reduction potential. Even with this uncertainty, the campus community advocated for the aggressive carbon neutrality date of 2020 to spur deep cuts in emissions quickly. - UM CAP
- “Due to current and anticipated future budget limitations, priorities for funding this plan may focus on low and no-cost strategies such as education programs, and those with very favorable paybacks that can help to finance the cost of later measures through their savings.” (CSU, 41).

Funding required for further action

- To implement this Climate Action Plan, the strategies identified will need to be prioritized, funded, and assigned for further action. Teams will need to be convened to research wind power, biomass energy generation, funding, and carbon offsetting options. -UM CAP
- As this strategy is an expensive endeavor, more research on possible grant funding will need to be conducted in order to evaluate the feasibility of this project. - UM CAP
- “Utah State University will not be able to make significant progress on its climate commitment without designated funding from the College” (USU, 29).

Potential funding sources

- “Potential funding sources may include parking fee revenue, establishment of a revolving loan fund, building endowments, utility company incentives, federal and/or state grants, donations, voluntary student fee increases, and/or increasing the institutional operating budget” (USU, 4).
- “The University can explore several opportunities to help fund implementation of the plan’s measures including: Utility rebates, federal incentives, grants, third-party ownership with power purchase agreement, lease-purchase or other financing mechanisms, performance contracting, capital campaigns, public/private partnerships, and revolving loan funds” (CSU, 33).

USU Summary: USU recognized its critical need for funding in order to achieve a carbon-neutral campus. A list of potential strategies to exploit financing opportunities was presented including parking fee revenue, revolving loan fund, building endowments, utility incentives and rebates, grants and donations, student volunteered fees, and lastly USU’s institutional operating budget. When sustainability is integrated with business, it can reveal investment opportunities and essential tools such as LCCA, grants, and rebates that lead to long-term operations.

CSU Summary: All of CSU’s proposed emissions reduction projects were analyzed to estimate costs, looking at one-time or first capital cost for implementing the strategy, annual operations and maintenance (O&M) cost, annual cost savings based on current utility rates, and a simple

annual return on investment (net annual cost savings/one-time cost). The CAP proposes that these costs be funded through several sources, including the establishment of an Energy Reserve Fund (ERF), which was seeded with one-time deposits of \$500,000/year for the first 5 years, with all project savings returning to the fund for future projects. The fund became self-sustaining after those five years. Building funds were also discussed as a way to incorporate sustainability projects within building projects. Overall, the CAP discussed the following potential funding sources: utility rebates, federal incentives, grants, third-party ownership with power purchase agreement, lease-purchase or other financing mechanisms, performance contracting, capital campaigns, public/private partnerships, and revolving loan funds. Knowing that funding is limited the CAP stated that low- to no-cost projects would be prioritized, particularly projects that would lead to net savings.

Summary of clear subthemes:

Some aspects of funding have been very successful. One of the most dominant subtopics within funding is revolving loan funds (RLFs), also called green revolving funds or energy reserve funds. Especially when implemented from the very beginning, they have proven to be an effective way to finance projects and “are really powerful tools for investing in the campus” (Stacey Baumgarn, CSU). The institution saves money as “the university invest[s] in itself, pay[s] itself interest, but paying itself interest at a higher rate than it would've achieved on the market” (Jennifer Bodine, Sustainability Manager, Weber State University). The extra savings are funneled back into the fund and the university, enabling universities to implement sustainability, energy, and water conservation-related projects. Rather than searching for funding from miscellaneous sources, RLF's have institutionalized the process and eased the financial burden. For CSU's energy reserve fund, it became “self-sustaining with annual allocations of savings from previous projects. The Energy Team in Facilities Management [then] develops a project list for the ERF each year” (CSU CAP, 17). Universities have also observed that with CAPs, they have been able to save in utility and energy costs, implement efficiency projects, finance sustainability-related positions on campus, and fund future projects. With “recycling money from savings,” universities have seen the tangible benefit of not only focusing on the backlog of deferred maintenance but “taking it a step further and do[ing] things for energy efficiency” (Stacey Baumgarn, CSU).

In addition to successes, there have been significant roadblocks in funding. Without RLFs, schools have had to piece together funding from various sources such as taxes on parking permits or establishing student sustainability fees. Other potential sources listed in CAPs include “building endowments, utility company incentives, federal and/or state grants, donations, and/or increasing the institutional operating budget” (USU CAP, 4). Finding financial support and securing funding has proven difficult. Performance contracting is potentially an option but requires enough staff to help manage it. It is especially difficult with budget cuts due to COVID-19 to aim for any new initiatives. Another hurdle for resolving funding scarcity is getting the university on the same page about how economically viable and cost-effective CAP projects can be; this understanding may come about with a “shift of mindset of looking at the actual costs of carbon and factoring that into [the] economic equation” (Zac Cook, USU).

There was a clear consensus that funding is essential to the successful implementation of CAPs. For example, “Utah State University will not be able to make significant progress on its climate commitment without designated funding from the College” (USU CAP, 29). While funding is required for further climate action, limitations in money, research, and resources have

meant that some plans have been at a standstill or have to “focus on low and no-cost strategies such as education programs, and those with very favorable paybacks that can help to finance the cost of later measures through their savings.” (CSU CAP, 41).