



## [The Bright Side Episode 8: Sustainable State](#)

Produced by  
CEDAM

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Michigan Municipal League  
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**Jacob Corvidae** Welcome to The Bright Side, the show where we shed light on the people, places and stories that make Michigan great. In today's episode, we're going to take a look at ways to do things better, from recycling to building homes to energy efficiency.

I'm Jacob Corvidae, and we're standing here at WARM Training Center. WARM is a nonprofit organization and a Michigan energy demonstration center. What WARM does is we create opportunities for people to learn about and practice the sustainable use of energy and other resources.

So, often when people are wondering how to make their homes greener, they're not sure where to start. We can answer all sorts of questions. Maybe wondering if the lights in your home are using too much power? We can show you simple ways to make that better. Sometimes it's as easy as switching out to compact fluorescent light bulbs, or we can show you more advanced things too like using LED light bulbs where appropriate.

Sometimes it's simple steps, sometimes things are more involved, depending on what you want to tackle. Could be a variety of things like more eco-friendly paints that help keep the air quality better in your house. Better insulation, recycled materials like recycled plastic that can be used for lumber, for decking, porches. All the way over to things like radiant floor heating. This is a Michigan made product that makes radiant floor heating cheaper to install and easier to heat your home with.

Lots of things people can do and lots of benefits, including saving costs on their energy bills, water conservation, creating a healthier, cozier home.

But there's more than one energy demonstration center in Michigan. We're going to visit another one, Michigan Energy Options, based in East Lansing. Michigan Energy Options has a bunch of different demonstrations, displays, and lots of information to help show people better sustainable practices, both indoors and outdoors.

---Michigan Energy Options---

**John Kinch** Well, you're standing in a building that has been a pioneer in terms of demonstrating how folks can make their own homes or businesses more energy efficient. We began way back in 1978 as Urban Options as a demonstration center for people to come in to the building and understand how they can have better insulation, better water conservation, better lighting, all sorts of things that make both the quality of their own life in their home better, but also makes the home more energy efficient, saving money and also saving energy.

And we're right now giving ourselves what I call a green facelift. We're getting LEED certification right now, and that improvement includes also updating our demonstration center displays and our exhibits. Twenty years ago we were demonstrating CFLs in the ceiling here. Today we're going to push LEDs. That's the next generation of lighting.

**Lia Spaniolo** Out here we've been doing a lot of improvements with the garden space and we have incorporated a lot of different pieces that are integrated together that really show how you can create a sustainable landscape for your home, even in a small urban plot like this one.

We've manipulated the terrain to include a very extensive storm water management system, so this site actually will capture about 80% of our storm water runoff, which is very important for keeping pollutants out of the streams and the rivers. It then filters out naturally in the garden that we have here.

Our rain barrels here capture the water that's flowing off of the roof. What we can do with this rain barrel water is then water our plants that we have in the garden instead of relying on city water. But then also if we have overflow, that will then

flow down into a series of pipes that then flow into the rain garden that we have out in the front of the yard.

The permeable pavers, there's three sets here and they work really well with the aesthetics of a home. But also there's pervious concrete way in the back that works very well with parking lots, larger concrete spaces, that actually drain water directly down into the soil instead of pushing it off onto the side streets and sewers and that sort of thing.

**John Kinch** This carpeting, once we're done with it, goes back to the manufacturer and then the manufacturer then grinds it up and has it come back to be carpeting again. 100% of it is reused, and that's an idea called "cradle to cradle" and it's a really important step forward for sustainability because even if you're doing your best in terms of recycling products or making sure they don't end up landfills, there's still going to be waste. And this sort of idea is no waste at all.

We also are doing a lot with renewables, solar in particular. So we have a lot of expertise with solar. We can help people understand if that's the right system for them. On our building ourselves we have a solar roof and plus we have solar panels here, so we also understand sort of the trials and tribulations of having renewable energy on site.

On good days when we have good sun and we're not running too much equipment inside there, we're producing more power than we're using.

We do low-income energy programs in the Greater Lansing area and across the state to help folks there. We do utility programs working with utilities to help their customers save energy.

**Lia Spaniolo** We have tours open to the public. People just need to call us or let us know if they want their group to tour. We also hold a number of workshops and educational opportunities for people to come and learn more about how they can make their landscape more sustainable.

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Michigan Energy Options  
[michiganenergyoptions.org](http://michiganenergyoptions.org)

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**Jacob Corvidae** Big cities and rural areas alike can benefit from sustainable practices. Now, this is a wind turbine. It's a small one, the kind you might see on a house or a small farm. We're going to take a look at the large kind and see how they work and how they affect the community.

---Gratiot County Wind Farm---

**Don Schurr** This is at this time the largest wind farm in Michigan. There are 133 wind turbines in the Gratiot Wind LLC and 34 more wind turbines planned in the Beebe Community Wind project, which is a collaborative effort between the Beebe Community Wind folks who are from Gratiot County, Nordex Company, and Exleon.

---Gratiot Wind Farm: 133 turbines: Wheeler Township, Bethany Township, Emerson Township, Lafayette Township; Beebe Community Wind Farm: 34 turbines: Emerson Township, North Star Township, Hamilton Township---

Approximately 50,000 to 54,000 homes can be powered by the Gratiot Wind LLC project. Gratiot Wind LLC project has GE 1.6 megawatt turbines. They are 330 feet at the hub. The blades are approximately 81 feet long, so when you put them together they're pretty tall. They're substantial machines.

To make a successful wind farm first you've got to have wind. Second, you've got to have a way to carry the electricity that might be generated from the area where the wind is blowing and the power is generated. Third, you have to have a set of ordinances or rules and regulations which allow a viable commercial opportunity to take place.

---Gratiot County townships, cities, and villages joined together to make a countywide master plan and wind farm ordinance, something unheard of in Michigan until now.---

**Don Schurr** And ultimately over a course of several years, that's what was done to make it possible to have one set of siting guidelines for what has now become the Gratiot Wind LLC and subsequent projects which are under construction right now.

There are a number of ways that the wind farm impacts the community positively. First, the obvious one that everybody zeroes in on is the tax gain that comes from substantial investment. So there's a gain there. Second is farmers who are participating in the lease pool, approximately 250 families, will gain a royalty payment on an annual basis for the 20 years of the contract and the renewal possibilities. Third is the spinoff benefit that comes from that. The location of the wind farm and the substantial investment has made it possible for us to construct a new industrial park in the village of Breckenridge and that industrial park has been the location now for the maintenance and operations buildings and it's also the location for other businesses who have been able to locate here and grow because of that initial benefit.

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Gratiot County wind farm  
gratiot.org

Wind project resources for Michigan communities:  
michigan.gov/energyoffice

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**Jacob Corvidae** We're now standing in Focus: HOPE's Warehouse D, where WARM Training Center has a deconstruction operation. Now what deconstruction means is that we're taking apart old houses to reuse the materials inside. Very different from demolition, where you simply tear the house down.

And we're able to get some remarkable things. When you first take the lumber out, it looks like this. May not appear to be much of use. We're able to turn wood like this into things like this. Now imagine a set of cabinets that have a tag on it that says this originally came from 1646 Trumbull Street. It has history. You can capture a piece of that history for your own home.

Lots of other things we can do. We can make these beautiful wood block pieces, like a cheese block. Or even these countertops made from wood ends. We've got these actually being used in various businesses around Detroit now.

This idea that we don't have to consider all these things a waste, they can actually be a useful resource, it's an idea that has lots of legs in lots of different places. In fact, if you ask kids in Detroit about problems they see in the city, they'll often tell you one of them is trash. You see trash all over the place.

Now there's one group, Green Living Science, that's working with those kids to take that trash and do something new to it with recycling.

---Green Living Science  
Produced by Green Living Science---

**Matthew Naimi** Detroit has the chance to be one of the greenest cities in the United States. City administration and the Detroit Public Schools realize that you're just not going to throw money at this issue. It has to grow organically.

---Green Living Science, A nonprofit group providing recycling and environmental education to children in the Detroit Public Schools.---

**Rachel Klegon** If you ask students to describe some of the problems around the city, they'll tell you that there's trash and litter. And the students, they see it and they hate it. And what we're really trying to do through Green Living Science is change the status quo about thinking about the amount of waste that we create and thinking about the energy that we use and showing that recycling is something that everyone can take ownership of and everyone can do.

---In 2012, we helped 2,500 students learn how to reduce, reuse and recycle; collect 4,000 lbs. of paper; recycle 20,000 lbs. of phonebooks; generate nearly \$2,000 in prize money for school programs.

“The benefit to the students was amazing... they have turned into environmental stewards!” –Ms. Speegle, Nolan Prep

“Our students became aware that they can help the earth now, as children.” – Mr. Myers, Clara Rutherford Academy---

**Rachel Klegon** For most of these students, this is their one opportunity to learn about recycling and really help grow and create a strong recycling program for the City of Detroit. Going forward, one of our main goals is to have a recycling program in every school in Detroit.

**Matthew Naimi** The most effective way to really change the views on green and the environment in the City of Detroit was to work with the students because they’re able to go home and educate their parents and grandparents about green and the environment. Because it is for them. They are the future and working with the kids and getting them to be our biggest advocates is going to create a greener future for the City of Detroit.

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Green Living Science  
greenlivingscience.net  
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**Jacob Corvidae** We’re at the 71 Garfield building in Midtown Detroit. This place has become a model for how to do historic, green restoration. Let’s take a look.

So this is the lobby of the 71 Garfield building. Now this building had been through five fires and had been abandoned for quite a while when the developers came in and saw a vision for what it could be. They completely redid it. You can see this beautiful space here. Twenty-two units up above, all done with energy efficiency and historic preservation in mind.

So the building has a geo exchange heat system. They’re able to cool 22 units during the summer for only \$600 a month.

We are now in the basement of 71 Garfield and behind me is the geo exchange system. This supplies the heat and the cooling for the building by drawing the heat and energy from under the ground in the next door parking lot.

Next, we’re going to visit the Corner Brewery in Ypsilanti, the largest solar brewery east of the Mississippi. Now they’ve got Detroit made solar panels that are producing thermal energy – heat – and electricity, and it’s saving them about \$20,000 a year.

---Corner Brewery---

**Matt Greff** Corner Brewery, when we finish the project later this month, is going to make Corner Brewery the biggest solar brewery east of the Mississippi. We're definitely on the cutting edge and it's been such a difficult project I can see why other people have been reticent to get into it, but it's always really fun to be first and be a trail blazer.

**Susan Pollay** Very exciting. The Greffs are one of the most entrepreneurial and exciting young couples in the state. They get it. They absolutely get it that it's about the human being. but it's also about finding new ways to do old practices, but do them better and smarter.

**Matt Greff** We are putting 144 solar panels up on top of our roof, and what's really great about these panels are they're hybrid panels. Traditionally panels have either been photovoltaic to generate electricity or solar/thermal to create hot water, and these are awesome because they do both.

This is a solar awning that is going to cover the south facing windows of our brewery.

So far we think that we're going to be able to get almost 100% of our brewing water from solar energy and about 50% and hopefully a little bit more for the restaurant usage.

These big tanks behind me are 400 liter hot water storage tanks and what happens is you can see the piping coming up out of these tanks. They run up onto the roof, the solar panels absorb the sun, heat the water, pump that water back down into these storage tanks and then we have the water in these storage tanks available for use in the brewery and in the restaurant.

These are our fermentation tanks. So this is where, once we finish brewing the beer, it goes into these tanks. We add the yeast, and that's where actually alcohol is created as the yeast eats the fermentable sugars that are in the beer.

We have a 2,000 square foot storage warehouse that is completely heated and cooled using renewable energy technology. When we looked into geothermal technology, we thought, well that will be perfect. Instead of spending a couple thousand dollars a month on electricity usage to run a heating or air conditioner for this facility, for one up-front expense we can do six geothermal wells in the parking lot and maintain a cool temperature without having ongoing energy bills.

The longest beer will sit in here is two weeks and it's usually seven days to ten days. Happy to say that business is booming and so we're moving beer out of here almost as fast as we can bottle it.

This is where all of our hard work comes to fruition and we actually get to pull the beers out of the draft towers.

We've discovered over the years we've been in business that often times your personal ideology and philosophy can actually match up with good business sense, and that is absolutely the case here.

People are so supportive of anything that's made in Michigan or creates jobs in Michigan that you really just have this amazing community sense of appreciation for not only what we do, but what all the small business that are opening and starting in Michigan are doing.

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Corner Brewery  
cornerbrewery.com  
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**Jacob Corvidae** So most people are familiar with recycling, but recycling isn't the only way to make these things work. There's also reuse. We're going to visit the Habitat for Humanity of Clinton County ReStore, where people are able to donate older materials from their homes that then get sold to folks in the community. This reuses the materials and then also supplies funds for Habitat for Humanity to build houses that are energy efficient and affordable.

---Habitat for Humanity of Clinton County---

**Ruth Clark** We are just north of St. Johns on highway 27 inside the front part of our ReStore building.

If what a person has at home is reusable or resalable, we'll accept it from their home.

When you first walk in, we feature our furniture. The display is set up here and depending on how much we have – it depends on how much it takes up. We have an electronics area back over here. You can see there's TVs sitting around. We have several TVs in right now. Then we have dining room furniture, lighting department here. We have all kinds of chandeliers and globes for lights. If someone breaks a globe, this would be a great place to come and see if they can find a replacement. And that's the front part of our store. When you go through to the back, you find more building materials.

Most of our prices are between 30 to 50% of retail price.

Lumber and trim, doors and windows. We've got flooring, power tools, doorknobs, all kinds of screws and nails and fasteners. Anything that you need.

About 90% of it is donated. We have a donation center here where you can drop things off. Or call us if you have larger items like furniture or entertainment centers, things like that. Give us a call and we can come out and pick them up.

---You can donate almost any home-related items in good condition except mattresses, dishes, pots, pans, playground equipment, baby furniture and clothing---

**Ruth Clark** We just started a new program where we'll be able to recycle electronics and scrap metals. So if you have aluminum window frames that the window or the screen is no longer good, we can accept that kind of thing. Washers, dryers that don't work, we can take those now, and then any form of electronics we can recycle.

All of the money raised from this Restore stays right here with Clinton County Habitat for Humanity and helps support the programs to build the houses and do the refurbishing here in Clinton County.

**Roger Wells** We're in St. Johns in the Habitat house that we're building for a young family. We ended up doing in here an open kitchen concept. So the kitchen is all there and opens up to this living room. If we go down this hall, there's a half bath back there and a laundry here. This is a full bath here, and then you have the master bedroom, another bedroom, and another bedroom.

**Kirsten Morence** It's going to give us a lot more space and I'll have a washer and dryer right at home, so I won't have to take my laundry anywhere.

**Sue Carroll** They have energy efficient appliances so that their utilities are going to be as low as possible. So it goes along with the philosophy of keeping the house affordable for someone who's never had a mortgage before. It's their first home.

**Roger Wells** The furnace is 95% efficient and the hot water heater is very efficient. Everything is caulked and sealed tightly so there's no air getting in. It's a very tight house.

**Kirsten Morence** I just thought it would be nice, a new beginning, you know, for me and the kids. Kind of a fresh start. Start with a home, hopefully go to school in the next couple years, get a better job. I'll actually have to pay to own something instead of renting. So that's nice.

**Roger Wells** It's just wonderful. All the volunteers really feel good about it and I feel good about working on it.

**Kirsten Morence** It's just nice having a home. Something to call my own, mine and the kids'. I think they'll like it.

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Habitat for Humanity of Clinton County  
habitatclinton.org

Find a ReStore near you:  
michiganrestores.org

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**Jacob Corvidae** Next we're going to go to Ann Arbor for the Michigan Green Communities Leadership Academy, where teams of people come from around the state for two days to look at how they can improve their local community.

---Michigan Green Communities Leadership Academy---

**Laura Matson** This is the Michigan Green Communities Leadership Academy. It's a gathering of teams of three to five people from eighteen different communities from across the state of Michigan. We have folks from the UP and the west side of the state, Detroit metro.

**Chad Rogers** We've got all these different communities who are sending staff and resources to meet today to talk about sustainability planning, green infrastructure. I think that's a success right there.

**Marcus Kirkpatrick** It's a great opportunity to come together with folks from municipalities around the state and learn what folks are doing. We're all about bettering our communities, becoming greener and sharing some of the things we're doing and hopefully... hoping that it's going to help others.

**David Norwood** Today's event is very, I'm very excited about because it's a chance for me to bring together some folks from the city that I don't get a lot of time to spend with: our planner and our director of economic development. We're going to talk about some of the things that we could and should be doing in Dearborn to create jobs and create value in the city using sustainability as the backdrop.

**Laura Matson** There's also, we call them team huddles, where the groups from within the community come together and talk about what they've learned, what they're going to take back to their communities, and what sort of action steps or projects they're going to start implementing as a result of this workshop.

**Brian Watkins** Here's the biggest thing that my team and I took out of the seminar, and that is we need an institutionalized degree of thought about sustainability in Detroit so that these efforts to employ people, these efforts to attract businesses, these efforts to retain business are not in vain and we have some methods that we can learn here that will allow us to sustain that economic development.

**Laura Matson** I feel like folks in Michigan are often really modest about what they're doing, but when you sit down and talk to people, there's really exciting work underway across the state.

**Susan Pollay** Well downtown Ann Arbor is hot. It is absolutely a hot place. It's fantastic. We've got so much going on, we've got new businesses moving in, we've got new residents moving in. There's a lot of development still taking place despite the weak economy in the country. Michigan is on the road back and Ann Arbor is leading that charge.

**David Norwood** Well, the main thing that we've done in Dearborn is we have a recycling program that is taking off beyond what our expectations would be. In 2010, we changed over from 18 gallon bins to 96 gallon carts and our recycling has increased 50% by weight within a year. We had untapped demand for recycling in the city of Dearborn.

**Brian Watkins** There are tons of great things that are going on in Detroit right now. We are attracting more employees to the city than we ever have in the last ten years. Detroit is definitely on its way back, so, you thought Detroit was dead, you're wrong.

**Chad Rogers** A clean environment is a public resource, a public good, that everyone benefits from.

**Susan Pollay** It's important to build sustainably so that we don't have to tear it down a few years from today. Social sustainability is important. We are nothing if not each other, our communities. We need to find ways to keep the diversity of people in our community, find ways to have more social interactions in our community.

**Brian Watkins** What are we doing to make sure this place is good to go not only for my lifetime, but for my children and their children and their children after them?

**Marcus Kirkpatric** I think it's just a matter of ensuring the future with the decisions that we make today.

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This event is part of the ongoing Michigan Green Communities network.

Get involved at [mml.org/green](http://mml.org/green)

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**Jacob Corvidae** So today we've seen a lot of great ways that people around Michigan are working to make our communities greener and provide a better quality of life.

Thank you for joining me, Jacob Corvidae, on The Bright Side. If you'd like to find out more about the things that we saw in today's episode, submit ideas for future episodes, or share this one with your friends, please come see us at [brightsidetv.com](http://brightsidetv.com).

---Outtakes---

**Olivia Courant** Skyla, are you excited about the new house? [Skyla nods and runs off]

**Jacob Corvidae** ...ways to do things better. From building homes, making... things... greener? Doing... recycling! Recycling, that's the thing I couldn't think of.

**Ruth Clark** We don't take furniture. [the store is full of furniture]

**Olivia Courant** Okay, so we can start over.

**Ruth** You can cut that out! [laughs] I was like wait a minute. There's furniture everywhere in the picture!

**Jacob Corvidae** You can watch this episode again and again and again.

**Jacob Corvidae** Now there's one group, Detroit Living Science. Green Living Science. Rats! So close!

---Credits---

### **Host**

Jacob Corvidae, EcoWorks (formerly WARM Training Center)

### **Producer**

Olivia Courant, CEDAM

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### **Music**

Tyler Vander Maas – The Bright Side Theme

Van Syla – “Weekend”

Lohstana David – “La rupture”

Kevin MacLeod – “Funkorama” ([incompetech.com](http://incompetech.com))

Josh Woodward – “Cherubs,” “Fast Food Fantasy” ([joshwoodward.com](http://joshwoodward.com))

[freemusicforvideos.com](http://freemusicforvideos.com) – “Relaxed 4”

hjcrbass – “Bossa Nova Loop”

**Green Living Science**

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**Corner Brewery**

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