

# 24-06-21 TheBuzz web

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## SPEAKERS

NPR promo--Rachel Martin, Ethan Orr, Joseph Barrios, Zac Ziegler, Nicole Cox, Christopher Conover, Justin Caser

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### C Christopher Conover 00:03

Welcome to The Buzz. I'm Christopher Conover this week, reducing weights. The Buzz is beginning a three part monthly series this week, taking a look at the three R's that many who are Gen X or younger were taught about reduce, reuse, recycle. Joining me to start off the show this week is our producer, Zac Ziegler. And Zac, you've got a little surprise for me, so you say, to start things off, and from here, my script goes blank.

### Z Zac Ziegler 00:35

Yeah, so I wanted to take you back, as we've been talking about this topic, it was hammered into the heads of, especially people my age, it seemed in the early 90s. And that was right in my formative years. So you know how anytime you hear something a lot, when you're in that, like eight to 10, age range, it gets stuck in your head forever?

### C Christopher Conover 00:58

Exactly.

### Z Zac Ziegler 00:59

Yeah. So that's what happened with this. So I'm just going to put you smack dab into my world as we've been working on this series. Go ahead and click on the web browser on that and hit play on the YouTube video I pre loaded for you

### C Christopher Conover 01:14

Alright here we go

Alright, here we go.

**Z** Zac Ziegler 01:27

This has been playing in my head on a loop.

**C** Christopher Conover 01:30

Well, and now no doubt, it's going to be in my head and everyone else's for well, at least the rest of the show, in my case, probably the rest of the week.

**Z** Zac Ziegler 01:43

Yeah. But this actually it illustrates a point about these three items that we're talking about with reduce, reuse, recycle, I went back to rewatch this video. And so

**C** Christopher Conover 01:53

after it was stuck in your head,

**Z** Zac Ziegler 01:55

yes, yes, repeatedly. I hoped I could get it out of there. But so much of the time, when we talk about those three, we see a lot of stuff. And if you watch the video, anyone else who's who's that bold can go out there and find it, you see a lot about the stuff that we are throwing in trash cans. And that's something we're going to try and steer away from on these episodes.

**C** Christopher Conover 02:19

All right, so we'll focus on unique attempts to reduce our consumption this week. Zac has our first interview, he spoke with Justin Caser. He's the chief sustainability officer at Sprouts grocery stores. And they spoke about the company's decision to quit offering free single use plastic bags.

**J** Justin Caser 02:42

Yeah, I think it kind of goes back to one of our core values of care for the environment and our communities. We found that one of the biggest and most tangible impacts that retail grocery in general has on our environment is the distribution of single plastic and paper bags. So understanding that is a major impact and something that we can control in partnership with our customers. In 2023, we decided to eliminate single use plastic and paper bags. And really tried to encourage customers to bring in their own reusable bags. We didn't eliminate bags entirely. We do offer a variety of reusable bags. The most cost effective one is

10 cents a piece, which can be used over 125 times incorporates recycled content into that bag. So we feel like it's a really good option. If you still need to purchase a bag that we have an affordable option available to customers or all the way up to more durable, you know, higher end cloth bags.

**Z** Zac Ziegler 03:51

So like many Arizonans and I routinely escaped the heat by going to the beach in Southern California for for vacation. When I was there not too long ago, I was in a Ralph's which for Arizonans, that's the same as fries. And they had this same policy there, but I've noticed the fries here in Arizona don't have it. Is this something that maybe other companies do outside of Arizona?

**J** Justin Caser 04:18

There are a few other retailers who have made commitments and actually implemented single use bag removal. What, we've seen is pretty good adoption overwhelmingly the the customer responses have been positive as more than 70% of transactions, customers are bringing in their own reusable bags, or they're not using a bag at all. If it's if you're just buying a gallon of milk and that's all you're going to end for, you know, a lot of times just by default you know you're gonna put it in a plastic bag. So we've really significantly reduced the amount of bags that we put out into the marketplace. You know if we can keep bags from floating around our streets or neighborhoods, you know, I think that's much better. And then the bags that we do have available for the affordable, you know, 10 cents, they are recyclable back in our stores.

**Z** Zac Ziegler 05:12

So you mentioned some pretty high success rate numbers there. I mean, do you have any idea how many plastic bags this is a cutback on the use of

**J** Justin Caser 05:21

Around 160 to 200 million single use bags, you know, the more that we can encourage, you know, reuse, you know, the prevention of that bag is the most important thing and having options. You know, if a reusable bag is necessary, that we having good, affordable options is important for us and our customers.

**Z** Zac Ziegler 05:42

So we're we're talking about, you know, the bags that are at the checkout lanes, but that doesn't necessarily count for the bags that are used for, you know, produce, meat, how does that plastic bag usage compared to what you were going through before making the change? And is there much that can be done to limit those other bags' use?

**J** Justin Caser 06:03

Yeah, I think it's a phased approach. I think the checkout bags is a logical, you know, first step, just it's kind of a mind shift that that needs to happen and ensuring that you have reusable bags in your car. There's so much of a take make waste mentality, I think in our culture in general. So like, this is a good first step. And there are other options out there for reusable bulk bags, reusable produce bags, which we do offer in our stores. And they're displayed in those departments. So we do want to encourage customers to bring in their own reusable produce bags, they are out there. And that's another way that they can help to prevent the distribution of more single-use plastic out there.

**Z** Zac Ziegler 06:53

I worked at a couple of stores that sold groceries and some other stuff back when I was in college. And there was a lot of that thin, hard to recycle plastic going out the front door in the form of these bags. But there was it seems like just as much, if not more coming in the back door as far as what was holding together boxes and pallets of goods. Now your job is to worry about sustainability for Sprouts is there much that well either has been done since what I'm talking about was you know, 20 years ago, or the can be done on that front?

**J** Justin Caser 07:26

Yeah, as far as plastics generated in the stores, most all of our stores have recycling of the harder plastics. The softer plastics like shrink wrap, you know, product needs to come in and it needs to be on a pallet and it has to be stable. So it's often shrink wrapped with a stretchable film. So we capture that as well. That's the same program that customers can bring back their grocery bags, and bread bags and case overwrap all those things can be dropped off at the front of our stores. But we're also collecting these types of flexible films in the back of our stores as well. And they're combined and then shipped back to our distribution centers, where we recycle that those materials with Trex who makes kind of a durable manufactured plastic lumber. And then we also look at other opportunities in our supply chain, such as a lot of our leafy greens and broccoli in the like come in like wax cardboard boxes. So we looked at what are some alternatives for that, because that's not recyclable because of the wax film that it has. So another alternative is going to reusable plastic containers. So you know, that's something that we've tested and are launching this year to help remove all that material from our supply chain and go to a reusable option. We're always looking at different areas within the value chain from where our products come from, how it's distributed, how it's packaged in house or, or how leaves our store, how our customers are going to interact with those materials, to make sure that you know we're doing the best that we can to make sure that those materials kind of have a second life or third or fourth life. It's definitely like a systematic approach that we take to how we manage supplies and materials within our business.

**Z** Zac Ziegler 09:16

Justin, thanks for taking the time to join us today.



**J** Justin Caser 09:19  
My pleasure. Thanks for having me.

**C** Christopher Conover 09:21  
That was just in case stir the Chief Sustainability Officer at Sprouts grocery stores speaking with the buzz producer, Zac Ziegler. Perhaps the area that Arizonans hear most about when it comes to reducing consumption is water. 72% of Arizona's water consumption goes to agriculture. So what's being done to reduce that number? We spoke with Ethan Orr he's the Agricultural Education Technology and Innovation Specialist at the University of Arizona Cooperative Extension.

**E** Ethan Orr 09:55  
Well, Christopher, one thing I really should start out with if you look historically as a state, we actually use less water now than we did in 1962. Even though we have three times the population and the value of our ag production is 50% more. And the reason we've been able to do that is by investing in ourselves, we have better conveyance, basically, cement lining and then putting solar panels over canals, better crops, the U of A has done a lot of research into a new crop, guayule, that has a lot of opportunity, and better watering systems. And then with Governor Babbitt and the AMAs. And so this program started with a \$30 million grant through the governor's office through the Inflation Reduction Act last February. And what we've done with it is we took that and we've given \$23 million on we've invested in the farmers and those farmers have matched it with \$16.6 million of themselves, 42% of the project cost the rest we put into research. And just by changing the watering systems changing from a flood irrigation to a center pivot or drip system, we have managed just this year. And so this is an annual savings to conserve 36,418 acre feet. To put that in context for the listeners, that is 12 times the size of Tempe Town Lake, the average Tucson and uses 82 gallons a day. And so that is over what 400,000 people in Tucson drink every year three-fourths of our city, just with that small investment. Last year, the legislature funded us an additional \$15 million and they're looking at funding some more. And so this is just the beginning of the water savings that we can create

**C** Christopher Conover 11:34  
People, again, who are not necessarily part of the agricultural industry will say, Well wait a minute, in order to grow plants, least the ones on my back porch, we have to have water. Is there a point where we're going to get a diminishing return, we're saving water, but we're not growing as much agriculture, which then has an economic role on it, that hits everybody?

**E** Ethan Orr 12:00  
You hit a really good point, there's a couple of things going in play. The first are externalities, the last thing you want to do is start following field. Because if you look at what's happening in Pinal County, where the Ag allocation has gone to zero for irrigated water, if you don't, if you don't take care of that land, you create dust storms exacerbate the haboobs. And then you also

create these heat island effects. The other thing that's so important is if you look at it agriculture has used a large percentage of the water but following the Pareto Principle, by investing in that sector, it's where you're going to get your cheapest and best savings. So for example, with this program, and I'm extraordinarily proud of this, when you look at some of the other programs, the numbers for the three year program, my cost per acre foot saved, the public sector cost is \$209 an acre foot. Now to put that in context, if I was going to do desalinization out of the Sea of Cortez, which was an idea that we were talking about just a year ago, that's going to cost me \$3,000 an acre foot. So all of this cost in addition to saving so much water, we're doing it in the most cost effective way. And I think that creates a bridge for our civilization for our state to really figure out what we're going to do long term

**C** Christopher Conover 13:12

In looking at crops and again, from the for lack of a better term lay person's view. We heard especially last year, a lot about alfalfa and how water intensive it is. We hear a lot about some of the leafy greens grown in Yuma and the Imperial Valley, which obviously is California, but it's right there and Colorado River water is involved. Do we need to make a change on some of the things that were growing in Arizona? Or can technology and some of the programs that you're running, reduce the water usage enough that we can continue to grow those things?

**E** Ethan Orr 13:51

I think in some cases, we have to continue to grow those things. 80% of the alfalfa in the state ends up consumed by Arizonans in the form of milk. And the reason we grow it is it has very high margins. But it's not just water intensive. You're getting 10 to 12 cuttings off of that. One of the systems we put up in our county, the gentleman is double cropping corn, which means that you can grow out thing of corn and then grow it again in the same season. Tucson is the only place outside of Egypt that we can triple crop wheat. And so it's not just about water, it's about soil and sun and reducing the carbon footprint of the transportation of those goods. And we are getting better. I mean, they already laser level, they already use drones. Agriculture is about high technology. The biggest issue that we had to help Yuma with was broadband technology last year, but we can do better. I mean, that's why I'm really appreciative of these cropping systems, because with a very small amount, we have saved more water than any of these urban ideas. But it also gives us the impetus and I believe credibility to talk about urban solutions. How do we do water calming those that water coming off the sky islands into the Tucson alluvial layer? How do we slow that water down to generate more water recharge, how do we capture every drop? And this is an ethos that I have found in our agriculture community. It's not just capturing every drop, it's capturing every drop and using it more than once.

**C** Christopher Conover 15:12

So 2050 rolls along, hopefully, we're all retired and enjoying our time, you know, with our families and travel and all of those things. Are we still doing agriculture do you think?

**E** Ethan Orr 15:26

Absolutely. And one of the reasons I like this program, we're doing it, we're spending a lot on

absolutely. And one of the reasons I like this program, we're doing it, we're spending a lot on research. And so one of the things that I've driven this program with because if you look at where ancient civilizations have failed, look at their cropping systems, like in Mesopotamia, and you see the salinity going up, and you see large canal infrastructures falling apart. And so I'm not trying to create generational problems by solving a short term issue. So our research has focused on that salinity, improving crop yields. And so we're saving water. But we're measuring, we're creating a healthier soil, soil biome. And we're seeing particularly in cotton, our crop yields go up with these systems, which is again, very counterintuitive. So I think that 2050, what does it look like? That's up to us. In fact, I was thinking about this, with, you know, where we are in this perceived crisis. One, you never make a good decision in the crisis. If I'm lost in the forest, do I start running faster? Do I yell louder? Do I break down and cry? Or do I pull out a map and calm myself and figure out what I'm doing? And and I think about that's where we are, we're in a crisis. But what do we do to resolve it? And I think science, research and technology and the iterative science, studying these crops and studying how we do better,

**C** Christopher Conover 16:41

It sounds like all of these programs, the Extension is supporting and helping out but be at the Gila River Indian Community, or the farmers themselves, they want to do this. This is not a university coming and telling somebody how to do something and they do it grudgingly. They seem to be almost seeking the knowledge out is that a good assessment?

**E** Ethan Orr 17:07

Very much. So. The first tranche of money we that, the numbers that I mentioned, there were 62 projects across the state. Every farmer worked with us partnered us, I have a team of about 12 scientists. And in addition to just putting in a system we're going in, and we're working through again, Applied Science and Research helping them on cropping decisions, soil decisions, these are not dumb people. And these are people that really want to preserve and conserve the land. And so they're doing the absolute best they can to grow crops under difficult conditions, but no one wants to waste water. And the farmers when given the opportunity to save water will. Additionally, even the pressure it's the pressure of the headgate by moving from an irrigated to a well water you have a lower pressure. So these systems help the farmers in Pinal County where we've saved over 5000 acre feet a year, we've helped them with that capital costs to make the transition going from irrigated to well water because you don't have as much pressure. So all of those farms were able to stay in business, prevent these giant dust storms and heat and haboobs, but then also grow crop with much, much less water.

**C** Christopher Conover 18:17

That was Ethan Orr with the UAE Cooperative Extension. You're listening to The Buzz. After the break, we'll see if you can get the recycling and reducing song out of your head and we'll talk about conserving the fossil fuels used to generate electricity. Stay with us.

**N** NPR promo--Rachel Martin 18:34

I'm Rachel Martin. You probably know how interview podcasts with famous people usually go.

There's a host, a guest and a live q&a. But on Wildcard we have ripped up the typical script. It's a new podcast from NPR, where I invite actors, artists and comedians to play a game using a special deck of cards to talk about some of life's biggest questions. Listen to Wildcard wherever you get your podcasts only from NPR.

**C** Christopher Conover 18:58

Welcome back to The Buzz. I'm Christopher Conover. This week, we're looking at efforts to reduce our use of finite resources so we pollute less. Tucson Electric power recently rolled out a new campaign aimed at reducing the company's greenhouse gas emissions from burning fossil fuels by 80% in the next 10 years, the campaign centers on encouraging customers to use less electricity during peak usage hours. To learn more about efforts to conserve the fuel that gets turned into electricity. We spoke with T E P spokesperson Joseph Barrios.

**J** Joseph Barrios 19:36

We have a couple of goals that we're working on right now. One is a specific goal that's achieving an 80% reduction in carbon emissions by 2035. And that's part of a formal plan that we filed with the Arizona Corporation Commission every year called our Integrated Resource Plan. So that plan takes a look it it looks forward 15 years, and that plan is something specific, something that we think we can actually achieve within that timeframe. The other goal is a little bit harder. And that's our reduction of emissions to essentially zero by 2050. That is an aspirational goal. And truth be told, we don't know exactly how we're going to get there. So we are looking to our customers for help.

**C** Christopher Conover 20:25

One of the big things that seems especially at this time of year, we often hear about when it comes to getting customers to reduce is those peak hours between 3 and 7pm? Why do we really need people to reduce usage in those peak hours?

**J** Joseph Barrios 20:41

really, there's, there's a number of different reasons but for customers, you know, we'll start with the simplest things. One, when you use less energy during those peak hours, that improves reliability for everyone who's on the grid. You know, as you can imagine, those peak hours between 3pm and 7pm, during the summer, it's hot, outside temperatures are high, everyone is counting on their air conditioning systems the most. That means the demand for energy is highest during those times. So anything we can do to reduce that usage during that time, that reduces strain on the grid. That's why we have a number of different programs and really pricing plans for customers who have the flexibility to do that. If they can shift some of that energy usage off peak, ultimately, it costs less for us to purchase that power, which we always need to do during the summer to satisfy those those peak energy demands.

**C** Christopher Conover 21:46



What are some things we can do to reduce energy because of course, between three and seven, that's when everybody's getting home. If you've had your air conditioner at a higher temperature during the day, maybe at 80 while you're gone, you start cooling it off. What are some other things people can do to reduce energy during those peak hours?

J Joseph Barrios 22:05

Really, that's a big question. Because there are there are lots of options for for customers. And they range from very simple things simple, no cost, low cost, things you can do immediately to reduce your energy usage all the way through, you know, we have rebate programs for customers who are in a position to replace their air conditioning system with a new, more efficient air conditioning system. You know, the real simple things that don't require any investment. And it's as simple as playing with your thermostat. The Department of Energy recommends that you set your thermostat at 78 degrees. And if you can bump that up by a few degrees, you can realize some some real energy savings. If you have an an oscillating fan or a ceiling fan, use that instead of trying to cool your entire home, you can use a fan and you know simply cool yourself. And the other very basic thing if you have window blinds or coverings, use them because when you let the sun shine in, you're also letting the heat in. But you know along with those simple things, we do have a number of different programs that they can can participate in. There are tuneups that they can have performed on their air conditioning system to reduce usage, they may invest in a smart thermostat, which we offer on our website at a discounted price. You know, smart thermostat. We also have a smart rewards program, where we work directly with customers who have a smart thermostat. And by volunteering to participate in that program is not mandatory, we can essentially adjust your thermostat during high heat events to try and reduce that on peak usage.

C Christopher Conover 23:56

So TEP as we've just talked about has a lot of programs aimed at reducing electric consumption over time and over the years. Zero hero is the latest. But there have been others you guys have given out free energy efficient light bulbs subsidize Energy Star appliances, planted trees to shade homes. That would seem in some ways to harm TEP's business model because at the end of the day, you're a company trying to make money, the more electricity gets used the more money and make so, for investors, how do you balance those things?

J Joseph Barrios 24:36

Well, we know that customers who participate in these programs specifically in those rebate programs that help them to use less energy, they like these programs. They participate in them when they can and in that way, we're like every company out there, we want our customers to be happy. We know they're counting on our service. We also know that during the summertime when their bills go up, they would like to see those bills go down. And so we want to help them do that, if we can.

C Christopher Conover 25:06

You all announced recently, some new solar projects and wind projects that will be big enough to reduce or produce power for about 11,000 homes. A lot of those projects come with a lot of battery storage, which is something that we are hearing more and more about, how important is it, finding a way to store that green energy when it comes to lowering emissions, and maybe just keeping the grid running?

J

Joseph Barrios 25:37

One of the things, one of the things that we talk about through the Net Zero Hero program is working with customers and helping them find ways that they can shift their energy usage. Now that requires a little bit of flexibility. One of the things that we're working toward is being able to expand those storage resources, so that during the day when solar energy, for example, is most plentiful, we can store that and then deploy it later in the day when demand is highest. Because, you know, for example, solar production doesn't match up with with energy usage. You know, solar production occurs earlier in the day, the highest energy usage comes later in the day. So really adopting greater use of storage resources, it's very important because while the sun is somewhat predictable, wind resources, which are great in the evening and overnight, are also not exactly predictable, we don't really know when those wind resources are going to produce. So having those storage resources will allow us to, to shift that clean energy to a time when customers really need it.

C

Christopher Conover 26:49

I'm sure somebody hearing this is gonna say, great, you want more green energy, more solar, rooftop solar, popular and gaining popularity, it seems like every time I walk through my neighborhood, somebody else is putting solar on the roof. But I'm sure somebody's gonna say well, then why not make net metering a better deal for customers, if that's the ultimate goal?

J

Joseph Barrios 27:12

Rooftop solar, it's it's an important, it's an important part of our energy mix, like energy efficiency programs, customers really like them. And we work with them all the time. As they install their systems. I think right now we have something on the order of 10% of our customers have their own rooftop solar system. Very few customers have their own storage systems. They're still counting on us during the day when it's hot, overnight obviously, to keep their lights on. And so we think that the incentives available to them now are are fair, you know, part of a long discussion and debate before the Arizona Corporation Commission and, you know, with local installers, customers and other other parties, what we've seen is a continual increase. In fact, I think last year was another record year for rooftop solar installations. So you know, we see plenty of customers who are still signing up, and we're happy to work with them.

C

Christopher Conover 28:17

Alright, well, thanks for inviting us downtown.

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**J** Joseph Barrios 28:19

Thanks for coming by. Appreciate it.

**C** Christopher Conover 28:22

That was Tucson electric powers. Joseph Barrios. And that's The Buzz for this week. Tune in next week as we look at the cuts in next year's state budget, and we promise no catchy jingles. You can find all our episodes online at [azpm.org](http://azpm.org) And subscribe to our show wherever you get your podcasts just search for The Buzz Arizona. We're also on the NPR. Zac Ziegler is our producer with production help from Deserae Tucker. Our music is by enter the haggis. I'm Christopher Conover thanks for listening.

**N** Nicole Cox 29:10

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