



Liz: Hi everyone welcome to Waste360's NothingWasted! Podcast on every episode we invite the most interesting people in waste recycling and organics to sit down with us and chat candidly about their thoughts their work this unique industry and so much more so thanks for listening and enjoy this episode.

[INTRO MUSIC]

Liz: Hi everyone. Welcome to the inaugural Waste360's NothingWasted! Podcast with me Liz Bothwell from Waste360 and Michele Nester president of Nester Resources and Chair of the Board of Directors of the Pennsylvania Recycling Market Center at Penn State. Among other things. Hi. Hi Michel. Are you ready?

Michele: I am Liz. Thanks for having me here.

Liz: Oh thank you so much for agreeing to be our first guest. We're very excited to have this conversation. Well first off since you're from Pennsylvania I have to ask, are you an Eagles or a Steelers fan?

Michele: Steelers fan. I am on that side of the state and I've probably just alienated you know half the population but there is a river that runs through our state the Susquehanna and you could pretty much determine the fans on east or west of that river.

Liz: Oh well I can't blame you and I'm an Eagles fan but I will not hold it against you because Pennsylvania strong. So please tell us a little bit about your background and how you ended up in this amazing industry.

Michele: Well my background and how I got into this industry, it was a fluke I will say I have a background in the Information Library Science and I was doing research for an engineering firm. They invited me to come aboard and they told me I had no idea what my job was going to be but that I would figure it out. And so I had some great mentors and I took Gretel compliance and was good enough or nice enough to run projects and then dabbled around in the industry with some private waste management company so that I learned that way and then one day I just decided to take the plunge and go out on my own and walk away from the corporate environment and is 20 some years later here I am and I'm glad I made that move. So, if it wasn't planned, let's put it that

Liz: oh that's great. I hear we hear that a lot with people who enter this industry it just happened on a fluke and then they find their home and like you said decades later here you are.

Michele: Right, I mean it's an evolving industry. I mean it still is. And there's lots of opportunity and I think we're right on the cusp again of seeing a lot of changes in our industry if people latch on to them. I'm a firm believer in reinventing yourself maybe every five to 10 years anyhow. So, I think if you're younger and you know somewhere mid in your career it's time to step back and see take a look at what's going on out here because you might be able to broaden your horizons a little.

Liz: Definitely. Now you mentioned changes and what a great time to be in this industry. What kind of changes are you seeing and what opportunities are you seeing out there?

Michele: Well I think we're starting to take a look at, and this is going to be a little slower but it's still a change in, we've always looked at the end of the pipeline, so you know when we are waste management professional so that's what we do. We take a look at what people discard things or they have no use for them anymore. It becomes our job on what to do for the with those. But I think we're realizing when you look at particularly the recycling part of our industry that unless we do something upstream it also affects our job.

And I mean the case in point is all the plastics that we have to deal with that really we have no market for and recycling is, you know, traditionally and people have collected

things in developing countries because they didn't have the natural resources to replace those things to make other items where we legislated recycling and we collect things hoping there a market. So, if we don't look at design for repair and reuse it, I think it's going to make the Waste Recycling Industries job that much harder because we're fighting a battle that we can't turn the force of right.

Liz: And do you think with the China and now the India band. I mean like you just said and like you've written recently that recycling today is not sustainable. Do you think enough time has gone by they were actually thinking of recycling differently and are we thinking of it in a solutions oriented way?

Michele: I think we're starting to think of it differently. And you know the circular economy should steer us in that direction.

I have heard some of your large corporate waste and recycling companies make the statement that they've just put China behind them that there's no sense dwelling on it that what they need to focus on our domestic markets and at educating the folks who give us our material is still a problem and we're not the only ones contributing to China and India. I mean Europe is also, so you know we've had the luxury of sending our materials to countries who don't even have an infrastructure to collect their own material and they certainly have large populations. So, I think if we if we think that's our solution if things aren't going to get better but if we start looking at new technologies and the kind of products, we produce then I think we stand a chance.

Liz: Ok. And you mentioned also the people who are giving us these materials. Do you think education and behavioral change will be a big part of this has to be?

Michele: You know we did open the floodgates a little bit by asking them. We catered to convenience, but we also added in some materials that had sketchy markets to begin with. You know we've always collected plastics 1 and 2 in residential settings and then we told them they could recycle all plastics which means that they gave us those plus all the ones they hoped we could recycle. So, you know there's always mistakes but we have to take a step back accept some of that responsibility. And I think we have a generation that's used to recycling so hopefully we'll be able to re-educate them too. But it but it is not easy it's repetitive.

Liz: Sure. What is it repetition is the mother of all learning right?

Michele: Sure sure. Just think about advertising how many times you have to show a product to somebody before they even notice that. Well it's the same thing with behavior

Liz: So true, so true. And so while we're on the topic of recycling and plastics as well you probably won't be surprised by this question. But so few stories have tipped our industry into the mass media frenzy like single use plastics has soared.

Michele: Sure, California has started. I think California caught the industry off guard somewhat. And then you know they had a lot of bills the municipal local government level and then the industry put a lot of cash into use trying to stop the statewide ban on things and then subsequently they got proactive in a lot of other states. But we are seeing a return of legislators addressing the issue of you know straws, plastic bags, takeout containers. And it does do some good. I mean we've seen you know the U.K. has been ahead of us for a while and they saw about an 80 percent drop in the use of plastic bags after they banned it. Well California is reporting I think with their last coastal clean-up about a 72 percent drop in grocery bags being collected and that is something that Keep America Beautiful sponsors the coastal cleanup and that is since late 2010. So, in just a year of having the ban they've seen that much of a change. So, you know it does help, but once again there's still so many plastics produced that we're just scratching the surface with that but the bands, the bands work. But I am a proponent of no band without a plan. So, you can't start banning things until you understand what's the ramifications of the replacement. And some of the replacements have other issues that but it's been a good start.

Liz: Ok. Good. Yeah. Sometimes the attention does bring light to it and can push policy and behavior change. So, I'm glad you're seeing that as a positive. But you're right. A band without a plan isn't really going to get us that far. I've also noticed that you've written and tweeted a lot about e waste and what do you think are we still dealing with just band aid solutions at this point or is progress being made here as well

Michele: I think you know to be honest I think the industry is trying and I'm going to say that as somebody who's you know actually try to push for some local legislation and

was in the in the middle of local government and the manufacturers and trying to be a go between. I will give part of the industry credit for taking steps to take back their own products but not in the way we think. Not just for recycling they're actually recovering products that can be repaired and refurbished. And it's like a lease program.

And I really think that's going to be the future if we want to end e-waste altogether.

Liz: A leasing type of program and then the onus or the payment really would be with the consumer, but in the front end, right? So that you're paying. You explain that to me a little bit more.

Michele: So I mean you know the consumer always pays it even if it's hidden in the cost of the product but in the lease program if you if you take a look at say I can't and I subscribe to this but I can't remember the exact date but say with your phone you sign on for like a for an Apple forever, an iPhone forever, Galaxy forever kind of program. So you pay a monthly fee that's part of your connection or to use the device but in like a year or two you just turn it back in and you get the latest greatest feature a device and you just keep paying the lease. So, it's you don't have to shell out the whole you know five six hundred or thousand dollars for a new device to get new technology. You just always get it, or they have the ability to download it for you. And so instead of actually owning things anymore there is a philosophy that we could go to just owning or using these delivery devices and you know it could be right down to automobiles and washing machines and things like that.

So, it's a way to reduce the waste because the companies that manufacture these things get to protect their proprietary information because they take them back and fix them. But they also get those raw materials to reduce waste.

One of the big problems we have out here is the cost to local governments and the industry does a really good job in paying for the cost of the recovery, taking the materials, getting them to certify recyclers and, you know, to the best of their ability preventing them from falling into the hands of, you know, people that would create nightmares with the environment. But the collection points also have a cost and that's kind of the line in the sand right now is the manufacturers feel like they've covered their cost and that they shouldn't have to pay at the local government. And where these

things are collected and that is where I think an advanced recovery fee could help everybody because we could also pay for some of those costs.

Liz: Sure. OK. That makes sense and then another very popular subject that has garnered a lot of attention lately is food waste, of course. And what do you think has our 2030 food loss and waste reduction goal created that entrepreneurial spark many predicted it would in our industry?

Michele: Well there are a lot of people looking at food waste recovery and, you know, by the time it gets to the consumer even at the restaurant level but particularly you know once it hits our refrigerator, the environmental issues have peaked at that point because it's, you know, all the transportation and everything that goes into harvesting the food. It's at the last point it can be so I'm not sure how many steps we've taken a corrective. But we certainly have created a strong awareness. There's not too many places you can go anymore where somebody is not talking about that. And I think if we could come to agreement on sustainable packaging and labeling. That would be a giant leap right there that could help us the other parts of food waste go way up the food chain. But when it comes to consumers and I'm guilty I mean I'm aware of it but one of the things I find as a two person household or somebody who travels and needs to buy things when I'm on the road, it's really hard to buy will go back to the single use packaging right. In some respects that could be a positive when it comes to food waste.

Liz: True. Very good point.

Michele: And I think we don't look at that as recyclers. We're all about recycling. But if you look to Oregon and they are definitely setting the example for the country is we need to start looking at lifecycle analysis. And, you know, when is a package bad and when is it good and being recyclable isn't always the best thing. There's other things that can go into a package that make it better for the environment all the way around.

Liz: That's true. I did you just read that article too that came out? That about Oregon and how it's a lot of it is the mis labeling and the misunderstanding of the words used and it's not just that a package is, or materials are recyclable it's should you be using it at all.

Michele: Right. Exactly. Exactly. And so, you know we've created this pressure over the past 30 years on producers to, you know, at least appear green. You better have that recycling symbol on your package. But then in our Merv's or material recovery facilities we're screaming at that end is, you know, why are you sending us these bottles or canes or things that look like this when they're not really recyclable at all. They just happen to have some recycled content in it. So, we've kind of created this catch 22 that we need to step away from and look at material use period.

Liz: I think right that's a good point. And you're so good on Twitter by the way I love reading your tweets. And one thing I noticed was you really have this genuine sense of optimism when it comes to upcoming generations. So just wanted your thoughts there. How do you think they'll view sustainability and what do you see them doing to influence policymakers?

Michele: Well I have to have hope in young generations because if we don't as somebody who's getting ready to pass the torch that would be you know ultimately depressing the city to step away from the industry and you know nothing's going to end. And also, that would be really egotistical. But I think when you see millennials and also Generation Z, they've been faced with some pretty big issues and particularly when I look at Generation Z I never looked at it this way before till they started really doing some research. But, you know, I'm a Baby Boomer and I was faced with in hindsight looking at it now it's amazing that we all didn't have to go into therapy because we actually had to train for nuclear bombs supposedly being dropped on us which, you know, was a real step away from reality. But this generation is looking at something that's truly real a real scare in that, you can already they can already see the effects of horrendous tornadoes and hurricanes and storms and flooding where we didn't have it. So, they're looking at their future and saying we need to do something about this. I think the recent election even though, you know, they didn't get all the people they backed but they got a half of the people they backed into office and there's not even that many of them voting yet. They're too young. So tomorrow will tell the tale of these youngsters actually are going to join this worldwide strike for climate action. And I think what impresses me is they can speak to the issues. They're not just "oh gee this is, you know, Live Aid and we're gonna go to a congressman and act like we're doing something". They can tell you what the issues are so that that's hope.

Liz: That is hope. And they seem to be able to pull each other together and really use sort of the masses to get their point across. They don't seem shy about that which is which is great.

Michele: They have no barriers. I mean I'm impressed by that. I mean we're still struggling as a country right now with you know hate and divisiveness and here, we have a generation that doesn't think anything of you know reaching out across the globe and talking to somebody, they just don't see that there's any lines. And I would love to be around you know in 50 years from now and see how does that, what does that make the adult world look like.

Liz: Sure. Oh yeah, time will tell. Also Michele, you've done a lot of work with public officials and private companies. What's the biggest challenge you find in bringing them together?

Michele: I think there is a lot of misunderstanding when you first start a project in why one side views an issue a certain way or what their needs are. And it's amazing sometimes where you know maybe the private sector doesn't understand the constraints of local government or how they have to operate and they can't just do things a certain way. And I can absolutely guarantee that from the side of local government it always works better for me if I can pull the officials aside and explain how the private sector looks at their costs because I always explain we could do anything you want, but everything has, you know, an incremental cost it may be a one hundredth of a cent but when they start to understand, well if I put this constraint in a costs contractor I want special services... It's my decision then if I can live with that cost but if they don't understand it then they feel they're being cheated.

So, education on that and just like with our consumers is a big deal and opening up the lines of communication and stopping that us against them really gets way better results like that.

Liz: Oh, I bet. So, what else should we be paying attention to in our world of waste, recycling and organics? Like for example is cannabis waste the next frontier? What do you say you are really it could be you know a lot of those folks take care of that?

Michele: Ahh, really, it could be. All of those folks take care of that at the source but as it becomes broader across the country then, you know, you're going to see some mistakes. I think the industry needs to know how to be prepared for that. I think we're going to see waste to energy grow but maybe in different forms. I think landfill gas is an underappreciated resource. And I think that we're going to see a lot more use of organics and biomass. So, renewables of all different kinds like that is where we're going to have to look. And I also think maybe redefine what we think of as recycling particularly with plastics. There are, there's a lot of technology out there that can take some of the plastics and turn them into synthetic fuels instead of worrying about bottle to bottle recycling for every single thing we produce.

Liz: Sure, there's a lot on the horizon isn't there? What advice would you give to professionals considering entering this industry? Whether they're young or a life change type of decision for the industry?

Michele: I think you need to be open minded. And I for technical people particularly you need to make yourself a little more well-rounded. I think it's good to hone your communication skills, your writing skills and to always pay attention to what's going on in other areas.

I see a lot of folks in our industry that can recite their state backwards and forward and that's all they focus on. And so, they are caught off guard where industry suddenly hit their state because they had the blinders on so to speak, so pay attention to Waste360 and read the articles.

Liz: It will definitely keep you updated. Right now, what keeps you busy outside of work? Do you have any hobbies or interests?

Michele: I love to travel, and I love music so I'm always listening to music and I'm a cook. But you now have to curtail that sometimes. So, you know, I'm getting for the end of my career so I'm enjoying sitting back and being selective about projects and learning what it's gonna be like to have a life again. So being able to travel without it being a deadline or something like that is going to be quite enjoyable.

Liz: I like that. And you've earned that you deserve that. And as you prepare for the next phase of your wonderful life, it must feel great knowing that the industry is more diverse with more women and more young professionals than ever before.

Michele: You look on their websites and maybe even if you have a chance to understand who the regional players are. But there are so many women and just from your 40 Under 40, I kind of giggled to myself on the number of vice presidents and regional managers and district managers that, you know, are maybe 35. And it lets you know that these are people that are going to be going places and I know some of these people and you can see that they're going to make a big change because they have an ambition.

Liz: Right and they believe in their cause and they want to do good things. And I think back to appreciating the younger generations interests and their beliefs and their moral compass in this bigger world and our planet. It's very impressive.

Michele: Any company who's not bringing some of those people win even for just brainstorming situations when you're trying to solve a problem or a process improvement, they might not always have the right answers but the perspective they offer in those meetings are things you never thought about before. So, you might be able to solve it once you hear what the problem really is because your perspective on why things aren't working might be totally off the mark of what your new customers are because they represent your new customers.

Liz: So true. Great point.

Michele: I mean, this is an example. Right here this is a change for our industry. Five or six years ago it was hard still to get companies to consider technology seriously.

Liz: Any technology or?

Michele: Any technology, right. I mean that they had grown into it somewhat, but you know maybe I should say 10 years there's been a vast change in how customer service is done in communications and particularly when you start getting down to smaller companies.

But when you look you know from the vehicles on up the tools they use. So, this is a step right here and just reaching out to folks who communicate certainly differently than other generations.

Liz: Wow. So, we've covered a lot of ground and if you have a lot to share where Can listeners hear more from you? Do you want to share your Twitter handle or your Web site for them?

Michele: Sure. You can see me on Twitter at @MicheleNestor

Liz: I've had such a great time talking with you and I know our listeners will love this conversation. So, thank you so much.

Michele: Thank you. I mean what an honor to be on your premiere. And you're now on my podcast playlist.

Liz: There you go. So, we will keep you posted on that. And enjoy your podcasts. Thank you.