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Connect and Innovate with UOW

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SPEAKERS

Zahra Shahbazian, Senior Business Initiatives Manager, UOW

Robyn Johnson, Director, Blend ESQ

Zahra Shahbazian 00:00

We've got the researcher from our Sustainable Building Research Centre (SBRC), they have collaborated with the other researcher at RMIT University to understand how the residential built environment could transition to circular economy. So what they do, they're investigating the material flow analysis across residential construction in Australia, and then looking at what material used and what waste is generated, in that way then, we can identify the supply chain that can be targeted to transition towards a more circular economy.

Robyn Johnson 00:37

Hi, I'm Robyn Johnson, and welcome to Wollongong, Let's Get Salty! For 20 years I've advised industry and business in environmental management, with leaders from community, environment, and industry, we'll deep dive issues that impact us all, and discuss how we as a community can take action to move towards a sustainable future.

Robyn Johnson 01:09

Today's guest describes the University of Wollongong as an ecosystem. Her engineering know how, and fun personality have allowed Zahra Shahbazian to nurture social connections into research opportunities that are quite frankly, super exciting!

Welcome, and I'd love to hear a little about your professional journey to where you are now as the Industry Research Manager of UOW.

Zahra Shahbazian 01:33

Hi, Robyn, thanks very much for having me on this, I certainly value that this podcast brings into our community and would like to obviously approaching more of our community members and businesses to understand exactly what University of Wollongong does, and what we're here to help them with.

So my professional journey it started from, I've got a Master's Degree in Mechanical and Manufacturing Engineering, but specialise in Advanced Manufacturing. So I've done that in Ireland, it's been 12 years

that we've moved to Australia, the main reason was the weather, changes in weather and also, we thought would be a nicer country to raise a family, and then there are more opportunities. We moved here 12 years ago, so my initial jobs would have been mainly at Illawarra, I would have been in a lot of local manufacturers doing various things like Consulting Engineers, and a project manager to a number of big projects that our local company were running for bigger manufacturers. Few years of my career I've been dedicating to establishment of the advanced manufacturing processes in Illawarra, and trying to make awareness of what they are and how they can utilise this new upcoming trends in manufacturing and what are the possible ways for them to interact with businesses who are already or have the advanced manufacturing embedded into their facilities.

So, this is like sort of my journey before I moved to University of Wollongong, it's been six years now that I'm there, and my initial role was to establishing this initiative that we have called Advantage SME, it was a program funded by the New South Wales Government under the Boosting Business Innovation Program. And the initial purpose of that was to establish in this innovation ecosystem to make sure that the local industries are working and talking with local industries and how we can influence and how we can help local businesses to improve their products and services, improve their future proofing themselves, and giving that competitive edge to our local industry to stay ahead of their game and making sure that they're ready for whatever future that brings in.

So prior to my starting there, this ecosystem sort of didn't exist, and I'm really thankful that we have and then again, working on the local manufacturing beforehand, as an engineer that gave me that experience to understand how our SMEs (small to medium enterprises) local manufacturers work, what are their pain points, what is it that it's obviously keeping them awake at night time, and you know, what would be their priorities day to day.

You're then all of a sudden coming and introducing this concept of working with your local universities. It was something that a lot of these businesses in this region haven't had done or haven't thought, or they wouldn't have thought it was their priority to do this, and the reason for that was very good for us was understanding in the past universities and industry we're working on different timelines and KPIs. And whereas with businesses time is important, time is money, and what they put in into a project in terms of the cash or their time, they would be expecting to receive some result in a timely fashion, where traditionally universities priority were sort of teaching, education and publications. And then those businesses who would have wanted to come and work with the university didn't know what to do, because there wasn't a clear process in there.

So as part of this initiative, Advantage SME, we actually started to meeting with businesses on a regular basis trying to understand what is it important for them, and the same way we were talking to our researcher trying to introduce this concept of working with industry partners, and what are their pain point is in terms of making this connection.

So, we've designed this program, this unit, to be that bridge, that gap, that it can be a single point of contact. When businesses have any problems and they want to talk to the university they know who to talk to, because University is a big place, so it would have been very daunting for them and they wouldn't know what's happening behind the doors on all those buildings, whether it's the 50 years old building or this shiny new glass building that is just sprouted at Innovation Campus, they wouldn't know what would happen behind that.

It's been a quite a journey in the last six years, and I can see from my time as well, I could see there's a huge increase in the number of businesses who are actively now working with the University, and they're engaged as part of anything that we do like in networking, whether we want them to come and support our students, whether we want them to be providing a lot of support in various things that University does. And a lot of people who are seeing now the benefit of spending some cash in, in kind contribution

to doing collaborative research project with the university has been phenomenal. So I often say this, but we have been quite renowned within the New South Wales universities and New South Wales State Government, for a regional university who's doing pretty good in establishing these pathways and, and having this huge number of success in collaborating with and involving the local manufacturers and local industries, in a lot of the projects that they do.

Robyn Johnson 06:43

It's very interesting. I mean, I know you from within industry groups, and you're always the person in the room to stand up and ask a thought-provoking question. What do you enjoy about that social side of your work?

Zahra Shahbazian 06:56

A lot, yeah, as you can see, I'm a very social person, I really like to engage in the conversation, and I always find the end of the day, no matter how much you clear out all the processes and putting it on the website, and then expecting people to know and but it never works like that. I think at any moment of time, I think you need to immerse yourself and then providing that opportunity or putting a thought in someone's mind, by like you said, asking questions. And then again, refer them back to what are the possibilities, and what are the opportunities for them, that they can, because you can never assume that people know what you're doing. So, the more you talk about it to people, and the more you engage with them, and trying to understand how we can think of it as a pain and a pain reliever. So, help me as a personal capacity, and my job can be offering assistance. So that's always I really value this. And I believe a lot of people value this as well.

Robyn Johnson 07:52

Yeah, I think we're so lucky to have the Uni here in Wollongong, and I'd like to chat for a minute about the grounds of the main campus of UOW. It's an incredibly beautiful campus, and it's an example of bush regeneration from cleared dairy farm to habitat comprising 10s of 1000s of locally native plants and animals. And when you UOW started in the early 60s, the only vegetation on the 82 hectare site, were a few large Moreton Bay Figs, and some stands of vegetation left within the creek lines, and so it's taken some amazing vision, and a lot of hard work to create that beautiful green space that's there today.

I studied at the university, did my Environmental Science degree there, and I sometimes still book my kids into the Sports Hub, just so I can come and work at the Uni, hang out in the cafes and dodge the duck poo near the duck ponds. But I find that green space and the learning energy within the Uni a really inspiring place to work. Do you agree with that?

Zahra Shahbazian 08:58

Absolutely, both campuses, not just Main Campus, Innovation Campus as well. We've got this amazing campus that allows you to, not just be confined in a room where you're working, that you can just take your laptop and bring it out. We've got him a lot like you said, ducks and ponds and a lot of beautiful scenery to sit outside and enjoy. I definitely do that as well sometimes my kids when the times allows and also like this beautiful programs UOWs renowned with, having this extra opportunity for kids to be involved in the campuses during school holiday programs, and then bring it on and sort of have that connection with nature.

I definitely feel that as well, and it's just like you're having a hard day, you know, just your boxed in, especially since COVID, where there is a lot of interaction now is over Zoom. So you have a day that it's like death by Zoom, more and more people find their days pretty much like that. So it's just that opportunity to walk out and then have a walk around the pond and the scenery as all the vegetation that you mentioned, it's really gives you that connection to nature, and I'm really proud that we have that on our doorstep. And I think this region Illawarra in general, will provide you that sort of connection to nature and then have that sort of lifestyle balance as well then, you know, especially when we don't have to

travel a lot to get to work and to campus and gives you that extra opportunity to bring that work life balance in your life, that's great about this region.

Robyn Johnson 10:25

Yeah, makes it all much more enjoyable. Do you have a favourite way to immerse yourself in nature?

Zahra Shahbazian 10:31

I like to go and walk on a beach, occasionally bringing my dogs as well and then just letting them off the lease and then go in and, you know, go crazy, and just sometimes just the fact that, (I'm not a surfer or anything like that, which is a lot of people in this region do), but just even go for a walk and, you know, take your shoes off and walk in the sand just feeling that under your feet and listening to the waves, and it's really calming.

Robyn Johnson 10:57

Yeah, I find that too! Alright, let's take this conversation now to the Innovation and Commercial Research Unit of the uni. Sometimes it's industry that drives research, and sometimes it's research that drives industry. Closing that gap can be a win for both sides, and also benefits society in general. If I came to you with an idea and said, hey Zahra, I want to work with the uni, what's the process?

Zahra Shahbazian 11:23

That's very good questions, I was sort of alluding to that as well. I would just like to take a step back and explain 'what does the unit do' and why we're trying to do what we're doing. I think they going forward, a lot of focus from either the New South Wales Government or Federal government is 'translational research', and what that means is to making sure you know what's happened at the university that we find pathways for it to be accessible by our industry partners, so we can make impact.

At the end of the day, all this amazing technology and science that become developed at the university could be just collecting dust on the shelves, you know, in someone's PhD thesis and research papers and with no apparent application for it. So going forward, we want to be able to putting these processes in place, and the support, the most important part of it is to support in place, supporting our industry partners to come and delve into what's available at the university and from our researchers as well trying to understand what is actually driving industries need at the moment, what sort of technology and what we have in house, how do we can make that connection? How do we make sure that our technologies get out and in the hands of the right people.

So at the end of the day, so we're not in the business of commercialising, and we're not in the business of making huge money. So what we are, we're at universities in the business of obviously, knowledge creation and knowledge dissemination, we want to make sure that we find the right partner so we can successfully pass that on, that knowledge, and they would have the resources and going forward to be able to commercialise that into the product and services that that community as a general can use and benefit.

So just some of the stats, Australia's is ranked last out of the 33 OECD countries for collaboration and commercialisation. This is obviously shocking. But we have seen like, in my own experience, we have seen how we can turn this by getting the industry and university collaborate in a meaningful way, and we can turn this around to something that it's easily accessible for industry to work with, and that we have some example of that that has been happening in the last two or three years, and I've definitely seen a shift in the attitude or from both industry and university to make this happen.

So one of the barriers is how do we connect? So if you were an industry, you were coming to the university, our unit would be, we are very specialised in strategic business engagement. So you will come to us, we've got various tools available to help you. So sometimes it's a matter of just connecting so we

know what you want to do, and we have a very good knowledge of what's happening in university, what are our research expertise, what infrastructure we have, what testing facility we have. And then we have a good knowledge of, you know, what's available out there in terms of funding. How can we help our business partners to access those fundings to lessen the financial burden of doing collaborative research?

So thankfully, New South Wales government and Federal government have few initiatives, some of them are constant, they're not changing, some of them are changing through the times. It's very daunting for businesses to keep up with all these changes of funding, so often, they'd be confused. Okay, which one is more suited for what I want to do? So we're helping that as well.

So, we helping them to identify the problem, if they don't know, so I'll get to that later on as well. We can simply connect them with a researchers, so we make sure that our researchers are very industry focused. They have a track record of delivering on time project for our industry partner, again, as I said, it's mentioned before, it's very important for, to working with industry-minded researcher who understand the importance of time and money that businesses invest in doing this collaborative research. So, we can keep up with our industry expectation. So then, we would just say, okay, well, there's the problem, there is the solution, and there's the funding, for example that could help you along the way.

Then along the way it comes with, in the past, they would have very complicated processes for businesses, the contractual processes, again our team we always say like 'one team, all the answers'. So we provide a lot of simplified processes in contractual, and then at the end of the day, you know, a lot of our businesses (keep that in mind, a lot of our Australian companies are SMEs, and let's say, I think I've probably heard the stat that 80% of Australian businesses are SMEs and a large portion of those SMEs are people who are employing less than 20 people), so you can imagine resources, it's a big issue for SMEs and also the day to day cashflow on how to make the businesses, so you really need to simplify this process for them, and highlight the importance of collaboration with the uni and expecting the industry partner to at least do less in the contractual matters. So, it's important that we would provide that advice for businesses who would like to understand, you know, what their obligation is contractually to university and what that entails.

In other big things, what we call an elephant in the room is usually the matter of intellectual property, there is often this misunderstanding that university is there to take people's IP away, and then, or not giving the ownership of the IP. So, it's important for people like us in, within our unit, to explain what does that mean, you know, it's not something that you should really be scared of, what's your ownership versus right mean, and what does university want to do with the IP that it's created.

So, a lot of the time, we have a lot of background IP at the university that we would like, we would encourage businesses to come and work with us, and as I said, to take that further and build on top of on the background intellectual property that we have. A lot of the times that we're creating a new research IP whilst we're doing the project with industry partner, again, there are a lot of various ways for businesses to own and have the right to commercialise and use it for whatever purposes they have. And we, myself in person, I find that talking to businesses beforehand, and laying out all the things that ahead of them, in terms of the contract, the intellectual property and put their mind at ease, and often I find that if you leave these things, at the very end, it might become a road block to a smooth transaction, but putting everything's on the table and explaining it in a plain language and what it is, and that it's something that it's way simpler than it sounds like and giving them those assurances that we're here to assist, and then the end of the day, what's important for us is to be able to work with industry partners, be able to continue, retain that right to continue, doing publication and using whatever the IP that's been created for continuing doing research and development, and we often find that that helps. If you're an industry, that's the simple way of getting to get your foot into the door to work with the university.

Often then we have other services that we provide, for example, Generator Lab. So sometimes the problem the businesses are having some innovative problems, but it could be too complex to be able to just 'what comes to mind', it wouldn't be that easy for them to come and say, 'okay, we've got this problem, what's the solution?' Sometimes you got to delve into problem itself and trying to identify it, because what's worse is to offering a solution to the wrong problems. So that's what we do with the Generator Lab here.

The purpose of the Generator Lab is to connect big businesses and their innovative problems with universities, researchers and also nimbling SMEs to solve with disruptive technologies. So, the big businesses might have these innovation problems, and they want to state that it's stopping them from for example, progressing further or developing what they have in mind in terms of the new product capabilities.

So, what we run it in the Generator Lab, we could run it in three stages, what we call 'innovate, initiate and ideate', it could happen in any order, it depends on the problem being presented. So it usually entails like a half a day workshop, and I have to say these services are complimentary to businesses. So they don't have to pay for any of these, so we want them to commit their time, and obviously are willing to work with the university to solve their problems.

So, the first half a day, we come in, and we look at the problem itself, and we're trying to delve into and see if it's too big, can section it into smaller problems to be able to provide solutions to, so in order to do that we're trying to get as much as we can in terms of the clear problem statement.

So, we can, for example, provide businesses with what we call a fuel sheet. And in that fuel sheet, we would basically ask them for three simple questions:

- What do you have in mind? Why do you think this innovation problem is there and why do you want to solve it?
- And what's the business overall objectives? You know, what's the clear vision for the business going forward?
- And what do you expect the university to help? and getting that clear expectation from businesses, and then we've been meet as well in person a number of times as well.

So, when it comes with the room with bringing all the experts in the field, some researcher that are quite active in that, and obviously, people like me as well in the room just to facilitate that discussion. And at the end of the day, we want to make sure that we leave with some clear problems, some potential solution for that, that is acceptable by industry partners, and some pathway forward. So whether if it's how we're going to tackle this, is it going to go straight into a collaborative research? Is it better to involve some PhD student, for example, to help businesses to do some legworks, for example, what are the fundings available for them to do and everyone would be leaving the room with some sort of an action item in their hands, the end of the day, if we don't take it all down, and then we don't assign actions to different people, we wouldn't be wiser leaving the room compared to when we first came.

So, we have done this processes quite a lot. There were some large companies that we've done the Generator Lab with and the result was amazing. We've established a lot of collaboration with the companies involved, we've established some student placement and some amazing project came out of that, we're hoping to do more of these.

Modern day example of this Generator Lab is the Supply Chain Challenge by coming and collaborating with us, we want this top leading organisation to come and give us this opportunity to talk about

expression of interest to their current or potential SME supply chain partner to meet one or more of their current or future business needs that require supply chain R&D and innovation.

So, couple of examples of these would be infrastructure, safety, future energy challenges, and opening up the new market opportunities. So what does that mean, a big businesses who was relying on a lot of smaller to medium enterprises, which is predominantly this whole businesses around this region, they have a supply chain challenge, but on its own, and just by working with the university, they won't be able to solve that. So what we're inviting them to bring a couple of those companies in their supply chain with them on the day of the Generator Lab, so we will have everyone's in the room, and we'll hear the problems from different source, and we're trying to find a solution that provide or increase efficiencies to SMEs to providing those solutions to big organisations. So it's sort of working collaboratively, we want people to actually come to the day open minded and ready to challenge themselves. It could be some of the solution might not fit with this conventional way that the businesses work. As long as they're willing to work with the university, with that new thinking and some commitment, we can see amazing results.

Robyn Johnson 23:28

That's really obvious, but maybe the opportunity for that is not often given. So yeah, I love that collaborative approach.

Zahra Shahbazian 23:38

That's why it's my passion to be in those networking groups as much as I can, you know, I'd be rarely missing one opportunity, if it's the morning breakfast events, or dinner, doesn't matter where it is, if it's in a Illawarra, if it's you know, involving driving like 300 kilometres, I'll make sure I'd be there. Because at any of them, when I go there, I will identify a business that I can connect with university and I can make changes, I can add value, and it's amazing what do you see by just networking. So it's important to keeping those networking alive and encouraging our businesses, for example, in more and more businesses to become a member of our local i3net network, it's important for businesses to not underestimate the power of networking and increase their chance of being seen and hear about all this amazing opportunity that that happens around them.

Robyn Johnson 24:30

Yeah, we're really lucky here to have someone of your background and advanced manufacturing expertise, and also just that passion that you bring to your role out there exploring networking opportunities, and you're really a connector between industry and the university and industry and smaller businesses, in terms of identifying those opportunities and letting people know about it.

Zahra Shahbazian 24:57

And one thing, what I found that the last few years of working, it's not just connecting businesses with university, but I've facilitated and made connection with some of the businesses in the region who would have been just two doors away from each other and they wouldn't have been aware of what sort of work they do, how they can collaborate and I really get satisfaction out of connecting people to each other and to the right people, so there would be mutual benefit for all parties.

Robyn Johnson 25:23

It's something I encourage my clients as well to look up and out at what's happening and what's coming down the pipeline, and particularly, yeah, in terms of advanced technology. So you mentioned to me previously a SWAT Group, what's this about?

Zahra Shahbazian 25:39

So, this is a new initiative that we've designed just after COVID hit, but we never had the opportunity to fully explore that and apply that, but I'm very pleased that we're starting to do that. I've mentioned a lot of these R&D SWAT teams. So we thought about this for teams, obviously, people are rapidly coming

together, you put a team together to respond to specific problems that just happened. For example, remember the time that we had this country was facing bushfire. So a lot of businesses would have found themselves in a situation that they didn't think before that they would. And that presented itself with a lot of challenges and uncertainties. So we thought about this SWAT team, and they said, 'Oh, why don't we put something together called R&D SWAT Teams?'

This team will provide a catalyst which enable the small businesses who are affected by a number of different innovative challenges to putting together a best possible response and bring together a team of experts that we can put together very quickly and help those businesses to at least initially, think about what can I do at the moment to expand this further on down the line. So I just give you an example, so this particular project that were, think of it as like a seed funding, okay, I don't have time to sit down and exactly work out what I'm going to do with university in the next 12 to 18 months, or there's too many problems that I don't know what to do. So we are enabling and deploying the SWAT team, which includes person from our team, let's say myself and couple of researcher, and we talk to businesses, and then what once we identify a quick project that we could do, that we wouldn't require cash contribution from the businesses, just their in kind and their willingness to solve this problem.

Let's say this gets them a three to six weeks project. So we want to be able to provide an initial response and initial solution to some of these problems. And if businesses like that, and they want to explore that further, then we will go down the other paths of like in a longer-term project. So this is something that I'm really passionate about. And I think in the current environment, would really help our businesses to have access to something that they could quickly run a project with the university, let's say or get some sort of a consultancy from the university researcher, and get the foot into the door, and hopefully that will play into a longer collaboration with the University.

Robyn Johnson 28:01

It's a really powerful problem-solving tool and huge benefit to our region to be able to deploy SWAT teams to solve these innovation challenges.

Zahra Shahbazian 28:11

Yeah, and I'm going to start talking about that, and I'm going to start advertising through different channels that we have, for example, we've got our own monthly newsletters and which we have a lot of subscribers, a lot of businesses and then we will use our so multipliers and industry networks that were connected, such as i3Net, we are hoping that we get the words out. And then obviously, we are already working with a lot of businesses that I could see immediate use for the R&D SWAT Team, that we'll be tapping on the shoulder and say, 'Hey, we're running this program, and now let's get the ball rolling'. Yeah, and I'm so excited for that to happen.

Robyn Johnson 28:47



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Robyn Johnson 29:23

That's awesome, so the university obviously has a big role to play in helping us shift with energy transformation and things we're trying to do with circular economy. Are there things that you can share with our local community about the university's role?

Zahra Shahbazian 29:38

Yeah, great question, as you said, the university at the centre of all of these exciting projects that is happening. To give you a couple of example, we've got the researcher from our Sustainable Building Research Centre (SBRC), they have collaborated with the other researcher at RMIT University to understand how the residential built environment could transition to circular economy. So what they do, they're investigating the material flow analysis across residential construction in Australia, and then looking at what material used and what waste is generated, in that way then, we can identify the supply chain that can be targeted to transition towards a more circular economy.

So there is a few things happening as well. Again, researchers from the same centre have wrote an online course on reducing construction waste for the New South Wales Office of the Building Commissioner. We've also been involved in some research project looking at using waste glass in concrete and there are other projects involving using recycled plastic in construction material as well, so there is a lot happening in there.

In terms of energy transformation, like it's a big thing at the university. I can say it's no secret that our energy supply landscape is experiencing unprecedented change. Give you an example, with one of the one four homes now having solar panel installed, and the recent events highlighting the need for research to rapidly change our energy supply market.

UOW is actively involved in research across all aspects of this, like the technical, social and economic of this energy transformation, and we are committed to helping unlock Australia's renewable energy potential by supporting our community and local industry to create sustainable jobs as well.

Some of the example of the project across all boards is, we're working for example, with a researcher we've developed new ways to efficiently produce clean hydrogen. Now, hydrogen is a very big buzzword around this region, there is a company that spun out of and it's commercialised and spun out of the University of Wollongong called Hysata, and they're very active and very successful in the region.

So we are also looking closely with BlueScope, which is our long lasting partner as well, to decarbonise the steel production, through some new methods using biochar and hydrogen. So now, again, BlueScope being a massive partner in the region, and we're undertaking number of different projects with them.

University's involved in providing advice on some better ways to operate electricity grid to support the solar and being through Australian Power, Quality and Reliability Centre (APQRC). So that's another centre that house within the Sustainable Building Research Centre, again then those number of projects that we're having in that front as well.

Again, touching based on the innovative new building materials and approaches that we have. There, we are pioneering the new battery storage technology as well. We're using the cheap abundant sodium to replace lithium at the Australian Institute for Innovative Material (AIIM). Again, a lot of these centres are within the Innovation Campus. We also have our iAccelerate, which is our in-house business incubator, and we're working with a lot of new technology start-up companies, and we're providing research services, potential support and a skilled researcher to fast-track innovation at the iAccelerate.

So, what happens in the companies are coming in with their own idea to iAccelerate and then we give them the power of connecting with our researchers and having access to our world class research and

helping them through this journey to bringing ideas and product into the market. So that's on the technology side of the research.

So now we're looking at the social aspect of it as well. We can't forget the impact the energy has on our daily life. We've got another centre at UOW, Australian Centre for Culture, Environment, Society and Space (ACCESS), and we're researching the interaction between technological fixes and social practices. And research has shown how social housing tenants experienced rising energy bills as anxiety that disrupts their sense of home as a place of wellbeing, and that improving energy knowledge helps low income families to improve comfort and reduce anxiety about the cost of energy. Again, like that, that social part of it is very paramount in all the research that we do.

In other part is recently we have secured \$10 million in Federal government funding to establish the Energy Future Skills Centre, and as part of that we're hoping to deliver the education, training and engagement needs for the workforce of the future, in partnership with local industry, community and global partners. So with all of these things happening, so it has to be some educational and training centre to bring it all together, and we're hoping to establish that centre soon.

And there's two other things happening, important things, in New South Wales as well. There's two different consortiums, we're working with some other partner to establish the hydrogen hub here in the Illawarra, and the Hub, we're hoping to build the foundation of the clean hydrogen production and refuelling network. And as part of that to provide for the needs of local industry and transport specifically in the future.

The other an initiative from New South Wales Government is again, we have some partners in some consortium to develop a Clean Manufacturing Roadmap for the region, and that's funded by the New South Wales State Government. So all together, we're also very excited by the opportunity that's offered by the government as establishment of the Illawarra as a Renewable Energy Zone (REZ), again, that's another New South Wales state government program. There are massive activities happening in energy transformation and clean manufacturing spaces here at UOW, and we're so across in so many different aspects of it as well, and all of our researchers aim is to help people of our region to prosper from shift towards renewable energy.

Robyn Johnson 35:31

Well, that's a fabulous wrap up Zahra, and it's such a timely and important part of this transition to decarbonisation. I think we're so privileged to have the university here helping us to fast track and lending their knowledge and skills. So many interesting topics there, I think there's probably a few podcast episodes where we can dive into some more detail with some of the researchers and bring that knowledge out to help people connect with each other and make those circular economy things scale up.

Zahra Shahbazian 36:03

As I said, there's a lot happening at UOW, it's hard to decipher all of that and for our community and businesses to exactly understand how it fits with their day to day business. And the key message is like to reach out to us, and we will help, there is no rule as in the company's too small or too big, we can cater for all. And then as I said, we are involved in different consortiums things happening at the Federal level and the New South Wales government level, and we'd be happy, we're always looking for partners, and we'd be happy to helping our partners, especially in our region to (and as SMEs, again to) making sure that we're bringing them along this journey, and they would be part of the solution, they would be consulted as part of this solution that we're offering.

Robyn Johnson 36:45

Yeah, awesome. So, this has been a really insightful conversation today, thank you and your passions' really pouring through. How do we find you?

Zahra Shahbazian 36:56

Thank you for questions, it's a sad fact that you can see me in all the networking events and breakfasts and dinners, I really welcome all the opportunities, if anybody wants to talk to me or talk to another member of our team as well, we're all very accommodating.

We have a monthly newsletter, and we have 47% open rate, which is which is amazing. I think you know that some things that I really look at the stats behind how many people opens and our electronic mail, how many people's actually click on the information that we provide. So, we evaluate that on an ongoing basis, we're trying to make sure that we're putting the information out there for businesses, information that adds value. So again, a lot of these would be the opportunities, we put a lot of the example of success stories. So, another thing for businesses to bear in mind is, by working with the University, you're opening that opportunity for yourself as well to be seen and to be heard. So, we use that a lot.

In the past, we've done a lot of video case studies, probably you can see that on our website, there is this ongoing opportunity for businesses when they have a successful and meaningful relationship and project with the university that will be very interested to make a short video out of that, so we can use that in our media and all our newsletters.

So, we believe that we have, to have this open rate, so we're delivering important information and something that adds value to our readers. So, keep an eye on that and always add you to our mailing list as well. We also holding a number of events throughout the years. Again, we always find our events are well attended. So often we have in excess of 40-50 people attending, scratch minus the two years of COVID that we were limited with the number of events that we could have.

So, one of the things that has been very successful in the last six months is we're running UOW industry tours of both Main Campus and Innovation Campus. So, we go through most of the research facilities that we have, like our Main Campus is a Smart Infrastructure Facility, our facility for Intelligent Fabrications. Main Campus we go through Australian Institute for Innovative Materials, and Tricep Facilities, the facility that we have on Montague Street, which is that Translational Research and 3D Printing facility we have. And we have, I'm really glad to say that our industry tour has been amazing, and the response to that was very positive, and often we invite our multipliers, you know, Business Development Managers who were working for a State government or Federal government to attend as well. So, what we're trying to do, we're trying to maximise the day that businesses give up their time to attend the university to make sure that they see and they know everything that happen in those research facilities, and also having right people in room to ask all the questions that they have.

We've ran about three of these industry tours, and we have delegates coming from Tasmania, we're planning to run one for businesses coming from Riverina region to university. And then the other ways that we do, we're actually visiting a lot of businesses, so that's something that we find very useful and powerful is not just expecting businesses to come and see us at the university. We actually travel, there's a couple of us who travels extensively, going to businesses, the distance doesn't stop us, we could be driving six hours or five hours, once we know that there is a potential industry that we can help that big bring them to collaborate with the university, and by going into their businesses gives us the opportunity to see not just as a researcher does that too, as well. So often we travel to businesses, with particular researcher with that particular research expertise, and that gives them that opportunity to firsthand experience what's happening on floors, be able to analyse the problems and then respectively provide a solution who is going to fit their needs, so many ways for us and really encourage businesses to come and talk to us.

Robyn Johnson 40:45

Yeah, the power of research is something that's just immense and sometimes forgotten about in the business world, so I encourage people to reach out and I thank you for the work you're doing and your team and the broader research community within the uni. I look forward to doing one of those industry tours one day, I'm a lifelong lover of learning, so those things are fascinating.

Zahra Shahbazian 41:09

Yeah, great, thanks for having me!

Robyn Johnson 41:12

Thanks again, bye!

Robyn Johnson 41:14



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