

Swell AI Transcript: Girls Go Circular Podcast V3.mp3

Matt Eastland:

Hi everyone, I'm Matt Eastland. Welcome to one of our special docu-episodes. In these explorative deep dives, we tackle the big questions within the food system, uncovering fascinating stories of innovation and change. Time to further explore the groundbreaking ideas and incredible people driving the future of food.

Poppy Waring:

Here's a fact that's hard to ignore. In Europe, under 3% of investment goes to women-led businesses. And this percentage hasn't changed in over a decade.

Daniela Garcia Moreno :

This statistic kind of scares girls away from going into areas where they're not likely to, quote unquote, succeed.

Laura Borge:

Yeah, when I hear that statistics, I feel that there is something that needs to be changed.

Poppy Waring:

This statistic points to a broader challenge. There's still a long way to go to ensure equal opportunities for women in many fields, including business and innovation.

Solène Moutier:

It's still seen as, you know, unicorns as opposed to something completely normal.

Poppy Waring:

One programme tackling this issue is Girls Go Circular. This initiative works to close the digital gender gap by equipping girls aged 14 to 18 with digital and entrepreneurial skills through a blended learning model. By fostering curiosity and confidence early, programs like this are building the foundation for a more diverse and inclusive workforce.

Solène Moutier:

Hi, hello everyone, my name is Solène Moutier. I am an education project specialist for the Girls Go Circular initiative and I work for EIT Raw Materials.

Laura Borge:

Hi, my name is Laura Borge, I'm a program manager at EIT Food and

thank you for inviting me to this podcast.

Poppy Waring:

In today's episode, we'll hear from Laura, Solène and one of their Girls Go Circular students, Daniela. Together, they'll share some of the real-world impacts this programme is having and the immense potential it holds to shape a more inclusive, innovative future.

Solène Moutier:

The Girls Go Circular initiative is led by the EIT Community Education and its goal is to train digital, entrepreneurial and green skills of teenage girls through an online learning program on the topic of the circular economy. So the goal of the program really long term is to encourage girls to study STEM and empower them to become future leaders and innovators.

Laura Borge:

You might be wondering what STEM stands for. So this is science, technology, engineering and mathematics. There will be more and more jobs in the future that will require these type of skills and these disciplines.

Solène Moutier:

We launched the initiative four years ago in September 2020. And so far, we're happy to say that we managed to train 45,000 girls across 30 European countries. I like to quote a Microsoft study that came out a few years ago that shows that in Europe, girls tend to be interested in STEM at the age of 11, 11 and a half, and that this interest starts to wane by the age of 15. And that is not due to the fact that they're less good at it. The reasons put forward are really the lack of role models, the fact that they lack practical hands-on experience with science and technology, and that they gain slowly the idea that this is not a field for them because it's not an equal place for employment between men and women. And so Girls Go Circular is really trying to counter this. This is why I was saying that the program tries to encourage girls to go and work in STEM, because as a result of this decrease of interest when girls are teenagers, then we notice that in Europe there is a big gender gap when it comes to STEM. So just to name a few key numbers, women represent 41% of women scientists and engineers in the EU. and only 19% of the workforce in the tech sector. And that matters because we need STEM and ICT skills in Europe, due mostly to digitalization of nearly all sectors, from manufacturing to health, to the food industry as well, and the agri-food industry especially. It's very important that those new employment opportunities are for everybody. So we anticipate that in Europe we'll have a massive shortage of skilled employers in the future. And we believe that by bringing more women to the sector, we'll be able to address this talent gap. It also has been proven that increasing diversity among teams and among companies has a positive impact on problem solving, innovation

capacity, which leads to more creative and effective solutions. which is really needed in today's complex world. And last but not least, by increasing female representation in STEM, that will also help in closing the gender pay gap and ensuring economic equality between men and women. So for all these reasons, we believe that it's really, really important to encourage, to bring more women into the STEM fields.

Laura Borge:

Through the Girls Go Circular project, we have a set of modules, and there are specifically two modules that are devoted to the food sector and sustainability. So, one of these modules is the Circular Economy in Food Cities, and through this, students learn about the problem of food waste, the problem of food loss, They are also introduced to some innovative technologies that are out there to tackle the problem of food waste and how to be more sustainable when it comes to the food sector. So, for instance, I'm thinking of the Too Good To Go app or also a startup based in Berlin that is transforming coffee grounds into biodegradable cups. And then in this module, students also get the chance to provide an overview of what are the different stakeholders that are involved in the problem of food waste and what kind of application they would like to develop in order to foster or to tackle the problem of food waste. Another module related to food is Smart School Garden, and here students are introduced on topics such as vertical farming or innovative technologies in the food sector, such as aquaponics or hydroponics, and students also get the opportunity to develop an application. about how they would manage a school garden. They would need to understand what kind of crops they would like to plant in the school, what are the different stakeholders that will be present, what are the different resources that will be needed if potentially they would like to create a smart garden in their school, and then at the end of the module they need to pitch it to the different students in class.

Solène Moutier:

When Girls' Code Circular was launched, that was in 2020, and that was a part of the European Digital Education Action Plan. And the target back then was to train 40,000 girls by 2027. And we managed to reach that target four months ago already. So now it's August and we've trained 45,000 girls. So that is really wonderful, and I think that is mostly due to the fact that our online program is available in 24 languages, which gives teachers access to newly created high-quality teaching materials in their native language. So we really had some feedback that this is something really interesting for them to have access to that, not just in English, but really in Romanian, Bulgarian, Lithuanian, Estonian, Swedish. So this is definitely, I think, one of the strengths of this project. We even have some language teachers who've been using our platform to teach French or German or Italian. So this is also something very nice for us. And another strength of the program, I would say, is the diversity of its content. So as we explained, at the core of Girls Go Circular is

an online learning platform. offering 18 courses, free of charge, and each course explores the topic of the circular economy applied to a different sector. So, as Laura mentioned, we have some modules on food and food circularity, we have some modules on health, on urban mobility, on e-waste, artificial intelligence, robotics, all sorts of topics, and we always explore the topic of circular economy applied to this sector. And that is the beauty of this EIT community project, is that all the KICs came together and developed content based on the expertise of their KIC. So that allows for teachers to choose the module that best fits into their curriculum based on what they're planning to teach, whether they're IT teacher or science teacher or civic education or language, then they can pick the module they like. or they can leave it to the students to select what they're interested in based on their interest. So I think this flexibility and diversity is one of the reasons why this program was so popular.

Laura Borge:

So now we are going to hear first experience from one of the Girls Go Circular alumni. She is Daniela Garcia Moreno and I hand over to you Daniela.

Daniela Garcia Moreno :

Hi, everyone. My name is Daniela Garcia Moreno and I'm a high school student from the International School of Luxembourg. And I am a Girls Go Circular alumni. And I'm here to tell you about my team and I's innovation, Be Mighty. Be Mighty is the robot that my team and I submitted to the 2023 Sustainable Robot Challenge that was organized by Girls Go Circular. Our project tackled the Varroa mite, which is a mite that infests honeybee colonies. It attaches itself to the body of the honeybee, and if not treated, it can collapse entire colonies of honeybees. And honeybees are essential to our food system as they pollinate a large number of crops that we eat every single day. The Varroa mite can only be treated really with pesticide. However, it's pretty hard to know how much pesticide you need. And depending on the severity of the infestation, if there's a lot of mites per number of bees, you need a lot more pesticide. But it's very hard to measure this. Currently, the only ways to measure this is taking out the bees from the hive using alcohol. But this kills bees instantly. So all the bees that you take out of the hive instantly die. That's the most effective way currently. Another way that does not kill bees is the sugar shake method which is covering the bees in powdered sugar and shaking them. But this requires taking the bees out of the hive and can be very tedious to do. So our idea was artificial hives are shaped like a rectangle so we would place like a wooden frame inside the artificial hive with a sensor in the middle and the sensor would scan the cross-sectional area of the hive making sure to get every corner. And from the picture that it creates, there's little pixels. Varroa mites are bright red compared to bees, which are yellow and black. So when you see the picture, the pixels differentiate in color. And using blob detection, which groups pixels by color, so if there's a large clump

of red pixels, that would indicate that there's a varroa mite in that section, compared to yellow or black pixels, which would indicate the bees. And with this, using an NFC chip, which stands for Near Field Communication, the beekeeper can get this data and get the estimate of the density of the mites in the hive without having to disrupt the bees. When I first started Girls Go Circular, I had no idea what I wanted to do. I knew something in STEM, but I didn't know exactly what. And I think Girls Go Circular, with the learning modules that I completed, I personally completed the fashion, the circular economy module, because I've always liked fashion and I love sustainability. So I think being able to combine these two areas was perfect and it's interactive. And I actually did it with a couple of my friends. And with that and the other learning modules that I've completed, like the robotics and the circular economy module, It's helped me solidify what I want to do in the future. It's given me more of an idea. I didn't even know a lot of these job opportunities or sectors existed and the jobs within them. I got to learn more about them. And also in the Women and Girls in STEM forum, all these other girls that I met were interested in a bunch of different things, which gave me a new perspective on STEM, all the different jobs I had no idea about. That's one thing. And the second thing is the leadership and the digital skills that Girls Go Circular equips girls with. There's so much to learn in those learning modules. Each sector is so different and there's so much development happening within each sector that not only do you gain new knowledge, but you also test your creativity skills as well as teamwork as you're working with a group of three or four girls. So I think that's really important and equips basic skills for the jobs in the future, whether that be teamwork, creativity, leadership and digital skills and I feel a lot more confident now that I'm graduating in a year going to university and looking for jobs I feel a lot more confident with those foundational skills that I got from Girls Go Circular. It creates a big sense of community within young girls and I think the support is really important because deciding what you're interested in at a young age can be very daunting and having this support and this community behind you and being able to find out about so many different opportunities is really amazing. This is my favourite part about Girls Go Circular, that it helps support young girls in this daunting journey because there's so many jobs and opportunities out there that it's hard to know which one is perfect for you.

Laura Borge:

We heard a great story from Daniela Garcia Moreno, so we would like to make a greater impact and impact the life of more girls through Girls Go Circular. So what we would like to do in the future is to expand Girls Go Circular, make it available in more languages and expand the geographical scope of the program and reach out to more countries where Girls Go Circular is not yet there. Moreover, we would like to continue organizing the annual forum that takes place once a year, and this is a great opportunity for girls to meet, to share their passions, to exchange about the program, and to connect within each other to make an impact in the circular economy and

sustainability.

Solène Moutier:

As Daniela mentioned it, I think what's really important also for young women to continue their journey to innovation is this sense of community, to know that they are not alone and they can be supported. I'm really glad to hear that Daniela has that feeling after participating in Girls Go Circular and the Women and Girls in STEM Forum, because I think Girls Go Circular gave them a taste for innovation and now they should really know that they're part of the EAT community. and as such that they should feel free to reach out, as Daniela did exactly. She reached out to us asking if she could have a mentor working with them on the BEAM IT project. So thanks to the IT alumni, we were able to find that for her. And I think this is exactly the type of initiative that we want to promote. So Girls Go Circular contribute to giving them the confidence, but also the network to achieve their dreams and to continue their journey on the innovation path.

Laura Borge:

Initiatives like Girls Go Circular can really bridge the gender gap in digital skills while creating a more sustainable world. So we encourage you to learn more about Girls Go Circular and to promote Girls Go Circular. If you are a teacher or a member of a school and would like to implement the Girls Go Circular programme, please get in touch with us through our website eit.girlsgocircular.eu.

Solène Moutier:

Given the current challenges that we're facing with climate change, it's very important that we use all the knowledge and entrepreneurial mindset possible in order to come up with solutions and to really rethink the way we produce and consume goods and services. And I really believe that in order to do so, we need to have diversity in the teams and a diversity of perspectives in order to come up with the most innovative solutions as possible.

Laura Borge:

Believe in yourself, don't get discouraged by what other people tell you to do or don't tell you to do. So really believe in yourself, go out of the comfort zone, push the boundaries, dream big.

Matt Eastland:

This has been the Food Fight podcast. As ever, if you'd like to find out more about what we do, head over to the EIT Food website at www.eitfood.eu. Also, please join the conversation by the hashtag EIT Food Fight on our X channel at EIT Food. And if you haven't already, please hit the subscribe button so you never miss an episode.

