

I'm a scientist too

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How can scientific thinking lead to impactful, real-world careers beyond the lab?

Margaux shares how her background in biomedical science, business and sustainability shapes her work in sustainable packaging – from using data to measure environmental impact, to balancing carbon, materials and performance. Her story highlights how science skills underpin decision-making across business, sustainability and innovation, and why curiosity and critical thinking matter in almost every career.

Tell us a bit about yourself and your career

I grew up and studied in Australia. When I left school, I wasn't sure what career I wanted, but I was curious about how the human body worked, so I chose a dual bachelor's degree in Biomedical Science and Business.

After university, I was still figuring things out. I loved science but didn't want to work in medicine, so I pivoted into business management consulting, essentially becoming a professional problem solver.

While consulting, I began a Master's in Sustainability. I saw it as an emerging space where complex problems, business, society and science all intersect. My studies covered everything from carbon science and food and water safety to statistics and economics.

That path led me to my current role in the Sustainability Team at Grounded Packaging, where we use real data to help customers make informed, environmentally responsible packaging decisions.

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What made you want to work in sustainable packaging?

Unlike consulting, packaging is something you can touch and see every day. You encounter it constantly in supermarkets, which makes both the problem and the solution feel very real.

Packaging is also a puzzle. It's never as simple as 'ban plastic'. You have to balance waste, carbon footprint, performance and recycling capability.

I was especially drawn to the materials science and end-of-life side of packaging – understanding what materials are made of, how they behave, and where they go once we're finished with them.

At school, what areas of science first sparked your interest in sustainability or materials?

At school, I enjoyed biology and maths because they showed me that nothing exists in isolation. In nature, one organism's waste is another's resource – a concept that sits at the heart of sustainability today.

At university, that interest deepened when I learned how to use data to measure the environmental impact of materials and products, particularly their effect on the atmosphere.

How do you use science in your role today? Was this something you expected?

A huge part of my role involves quantitative analysis. We use scientific methodologies to measure the impact of materials, calculating carbon emissions, raw material use and end-of-life outcomes rather than relying on assumptions.

Critical thinking is another key skill. Science teaches you to question sources, test hypotheses and explore different scenarios. Combined with my business background, it allows me to analyse complex data and translate it into clear, practical explanations for customers.

How does science link with sustainability and packaging innovation?

Science underpins almost every aspect of sustainable packaging. From calculating carbon footprints to understanding how materials interact with the environment, it's essential.

Packaging – particularly flexible plastic packaging used across supermarkets – is far more complex than it appears. Different products need different barrier properties, which we measure by how much air or water passes through a material.

Recycling processes also rely on scientific principles, whether mechanical or chemical. On top of that, there's a social science element: understanding how consumers interact with packaging, and how behaviour, convenience and infrastructure influence sustainability outcomes.

You often collaborate with suppliers and manufacturers. How does science support that?

Physics and chemistry sit behind much of what manufacturers do day to day, from producing packaging to testing new materials.

But communication is also critical. A big part of my role is translating complex scientific or technical information into language that businesses and clients can easily understand. Manufacturers tend to speak in engineering or chemistry terms, while clients focus on cost, branding and performance.



How does scientific knowledge influence lower-impact packaging?

Science and systems thinking help you weigh trade-offs. Without science, you might switch from plastic to glass to protect the ocean, but science shows that glass is heavier, more energy-intensive to produce, and more carbon-intensive to transport.

Understanding carbon and lifecycle impacts allows us to make better recommendations based on a customer's specific circumstances, and supports research and development of new materials that can work at scale.

Can you share an example where science directly influenced a packaging decision?

The great thing is that there isn't just one example – it's central to how we work. We use data-driven Life Cycle Analysis to assess a product's full journey, from raw materials through to end of life.

A common example is comparing compostable bags with recycled plastic bags. Compostable packaging is often assumed to be better, but from a carbon perspective, it can be more intensive to produce. For clients focused on reducing carbon emissions, this scientific insight can significantly influence decision-making.



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Does science help you navigate the impacts of climate change on packaging?

Absolutely. Science helps us understand which materials are suitable for different climate conditions and how packaging itself contributes to climate impacts.

Climate change affects crop yields, which is important when relying on paper or bio-based materials. Extreme heat can also affect packaging performance during transport or storage. Understanding material properties allows us to predict failures and assess risks, particularly for plant-based materials.

As businesses move towards net zero, the ability to measure and report carbon accurately is becoming an increasingly valuable skill.

Is there something you learned at school that still helps you today?

The scientific method – particularly hypothesis testing – is something I use constantly, even for business problems.

Science also teaches you how to write clear, concise reports and interpret graphs and data, which are essential skills when analysing sustainability reports or reviewing packaging tests

What advice would you give to young people who don't think science is "for them"?

Science opens doors in almost every industry, from law and fashion to food and business. You don't have to be a scientist to use science.

Often, it's not the content itself but the skills you gain – problem solving, critical thinking and quantitative reasoning – that are most valuable. If you enjoy learning how something works, whether it's the human body, the environment or materials, study it because you enjoy it. That curiosity will make learning easier and far more rewarding.

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