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YOUNG BIOVOICES
FOR A SUSTAINABLE FUTURE

BIOECONOMY careers and skills of the future

Career Sheet:

Technical advisor in sustainability in construction

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Bioeconomy Careers and Skills of the Future

Career Sheet: Technical advisor in sustainability in construction

About the career sheet

The career sheet serves as an awareness-raising tool for teachers and career counsellors. Specifically, it provides students concrete examples of jobs that are directly related to promoting Bioeconomy, elaborating on the skills needed to pursue a career in the field.

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CAREER SHEET: TECHNICAL ADVISOR IN SUSTAINABILITY IN CONSTRUCTION

YOUR NAME (YOUR POSITION, COMPANY)

My name is Marjolein Oonk, and I work at WAM&vanDuren in Winterswijk, the Netherlands. WAM&vanDuren is a building construction company focusing on sustainable construction using natural materials. I work as technical advisor in sustainability in construction.

OVERVIEW OF THE JOB

Since two years I give advice on the use of natural materials, such as wood, bamboo, clay, and fiber crops, to insulate buildings, and on nature-inclusive construction, biodiversity aspects, and designing climate-adaptive buildings so that they can withstand extreme weather in the future.

WHAT INSPIRED YOU

I love technology and nature. In my previous job as industrial designer, I found it annoying that I kept bringing more and more new stuff into the world, even though we often don't need it.

During my job application at WAM&vanDuren I talked about my passion for technology and nature. My boss created a position especially for me that addresses both topics. I've been very lucky.

Our way of building construction now really appears to hold the future and we are gaining a lot of knowledge to prepare for this future.

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TYPICAL WORKING DAY

My job is very flexible. I can choose whether I work from home or at the office. When I work in the office, I drive there in 45 minutes. I start at 8:00 am. First I read my emails and digital newsletters. Afterwards I often have a meeting about a construction project we are working on. At 12:30 it's time for lunch break and I go for a walk outside with my colleagues.

In the afternoon I do many different things. Sometimes I investigate materials for their technical possibilities and whether they are truly sustainable (there is a lot of greenwashing), and on other days a class of students comes along, and I teach them about sustainable building for the future. I go home again at 16:30.

STUDY & CAREER PATH

After finishing high school, I didn't know what I wanted to do. Everyone can study in the Netherlands. As a Dutch student you can get a study loan from the government. I worked for 3 years and followed different vocational and higher professional education courses. I ended up working in a theatre as a costume designer and stage builder.

But I wanted to do more, so I went back to study. After four years at Windesheim university of applied science I graduated as industrial product engineer. I went to work for an interior builder and was very shocked at how poorly they treated their staff and the materials they worked with. Nothing was sustainable. It was an unhealthy working environment and many people developed physical complaints because they had to lift heavy loads. Fortunately for me, I worked in the office where I did technical drawing work. But it didn't feel good at all.

After a year I applied for a job at WAM&vanDuren. I have no architectural training, so now I followed a short 4-month study through the company.

I don't think I would have done anything differently in my study path. Sometimes it was difficult because I didn't really know what I wanted, but I followed my feelings and now I am happy with

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my work. In the future I might do even more to protect nature. When nature dies, we humans (and animals) no longer have a place to breathe, eat and live.

KEY SKILLS

Analytical

- Problem solving mind: be creative and flexible.

Communication

- Trends: you need to know what's going on with new materials and design rules.
- Presentation: bio-based, circular and nature-inclusive construction is a relatively new concept. It is key we learn other people about how we make the world a better place.

Technical skills

- Engineering: knowing about materials and technical uses for them

Personal skills

- Self-confidence: *be a rebel.* People can be hard. You have to fight against big companies who are destroying the world.
- Personal responsibility: My colleagues follow my advice. I have to make sure that the information I given them is correct.

CHALLENGES

Not everyone readily appreciates that this new way of building construction is necessary to make the world a better and healthier place. You must be strong, able to persevere and not give up.

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WHAT YOU LOVE ABOUT YOUR JOB

I like the freedom in my work. Bio-based building construction is a relatively new concept in The Netherlands and there is a lot to learn about. You deal with working with nature and learn about growing crops, production of materials, construction and health in buildings. Bio-based building requires a complete different way of building design. You need to consider the re-use of materials, so that fewer virgin materials are needed. This will be better for the environment. That is why we want to use as little glue and screws as possible, but instead design buildings that can be dismantled. On the outside of the building, we want to offer space to the plants and animals that already lived here before we started building. So, we want to give them a house in the building facade (boxes for birds and bats, for example) and create a beautiful garden for insects and small, wild mammals.

Coming up with solutions to deal with heavy rainfall or high temperatures is also a challenge that we like to include in our building designs, so that everyone can live or work comfortably and we can prevent flooding, for example.

MOVING TOWARDS A BETTER WORLD

You can read the answer to this in the question above (What do you love about your work).

YOUR ADVICE TO STUDENTS

Jonna Jinton (YouTube) once said: *"Be like a bison."* I think this is a beautiful statement. No matter how bad the storm seems, as long as you walk calmly and trust yourself (as a bison does) you will always get to where you need to be.

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YOUR ADVICE TO TEACHERS AND PARENTS

Research the innovations that have an impact on improving the world and provide positive motivation to do good. Every little thing helps. There is so much to discover and there are so many good and fun things that are already being done. Share your knowledge, because no one can save the world alone.

LEARN MORE

https://theexplodedview.com/the-exploded-view-beyond-building/

https://biobasedmaterials.org/

Feel free to look me up on internet and send me a message. I love to learn from new innovations and help everyone who wants to better the world.

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