



## Project Overview

### Bilfinger Tebodin

Time period: October 2018 - October 2019

We believe that we can fight climate change by encouraging companies to adopt a circular value chain. The chemical industry is a top potential change maker, who can take the lead in reducing worldwide CO<sub>2</sub> emissions and bring us closer to a more circular future. Our missions are to (1) identify existing barriers that prevent chemical companies from adopting a circular value chain and (2) to develop a roadmap to help overcome these barriers. This roadmap is a targeted strategy tool that is based on case studies of early adopter companies, in-depth interviews with people from chemical companies, an overview of current governmental regulations, and a methodology for companies to self-assess their barriers against change. Our team consists of 4 business experts from Bilfinger Tebodin and 3 PhD students from SMO.



**Myrna Staring**

I am a 4<sup>th</sup> year Geophysics PhD student at Delft University of Technology. For my research, I'm currently developing and testing a novel method to improve imaging of the Earth. This is useful for more accurate and safe drilling for oil and gas, for studying the earthquakes in Groningen and to make better scans of the human body. In my free time, I practice ballet and modern dance and I love to travel. I am participating in the SMO promovendi program because I would like to experience working in a team with researchers from different disciplines and business talent with much more practical experience. Also, I believe that this unique combination of people might be able to come up with unique solutions to the barriers that inhibit the transition to a circular economy.

**Stephan Sneijders**

I am a Chemical Engineer especially interested in the fields of numerical methods, computational fluid dynamics, and computational physics. That's how I got involved in my current PhD research. As a PhD I'm working on modelling the drying of complex dispersion droplets, e.g. drying of milk droplets. I'm also very interested in the fields of process optimization and queueing systems. Occasionally I like to work on small projects related to those subjects in my spare time. Seeing the urge of moving from a linear to a circular economy made me feel like doing something about this instead of waiting for a change to happen. That's why I decided to sign up for the purpose accelerator of SMO.





Taavi Mandel

I am a 2<sup>nd</sup> year PhD candidate in the Finance department of Erasmus Research Institute of Management. My research focuses on the role of tax legislation on corporate finance and tax policy decisions and consequent implications on corporate performance, governance and agency considerations. An intrinsic motivation to understand and solve problems with societal level implications inspired me to join the SMO Promovendi Programme. Outside work, when I'm not exploring unseen nature with my wife, I love to play board games or guitar-shaped instruments.

Akim Hu-a-ng

"I am a graduated chemical process engineer (B.Sc) and now working for three years at Bilfinger Tebodin. As a Process Integrity and Safety Consultant at Bilfinger Tebodin I provide our partners in the process industry with customized risk identification and classification approaches regarding health, safety and environment. Consultancy gives me a chance to not only use my technical background but also to apply communication skills. Personally I think that circular economy has the potential to be of significant value in the future. This is the reason why I chose to join this program. I'm looking forward to work in a multidisciplinary team and curious to see what we will encounter in our research from linear to circular economy."



Abe Hendriks

I am a PhD student in the youngest faculty of the University of Groningen: Campus Fryslân. My research focuses on the politics behind the transition towards a circular economy, where I compare both international, national and regional levels in their understanding and application of the circular economy. What factors influence the translation of a normative concept, such as the circular economy, towards something that becomes a common understanding? Of course, I find this question extremely interesting, but for me it is the combination of different skills that could increase the potential contribution to actually drive this desired change from a linear to circular economy.

### Marnix de Jong

I am a process engineer at Bilfinger Tebodin. In my daily work I carry out calculations for new plant designs and alterations to existing plants, and I perform safety studies and reviews for our clients in the chemical industry. I am passionate about making the chemical industry more circular and being a part of the transition from a fossil based, linear industry into a circular renewable one. With participating in the Purpose Accelerator, I hope to add my piece to the puzzle to by identifying the barriers that chemical companies encounter in transitioning into a circular way of producing. In my free time, I love to play guitar, to sing, and going out with friends for a drink or to do sports.



### Matthew van Hulle

As an Environmental Management Consultant, my daily activities consist of fitting the industrial processes of our clients within the legal framework. Because of my education in the field of Chemical Engineering, I have a natural preference for the chemical industry and the many interesting processes that it envelops. For me, this project is interesting as climate change, and the accompanying legislations to battle it are bound to have a more prominent role in how our customers design their processes. However, more importantly, I have always had the intrinsic drive to provide my own contribution to our collective road to a more sustainable and eco-friendly future. Participating in this project is therefore a step in the right direction.

### Jordi Koes

I have the ambition to make a contribution to the fight against climate change. As consultant at Bilfinger Tebodin, I provide sustainable business solutions to our industrial clients so they obtain their sustainability goals and produce as effective, efficient and clean as possible. Focusing on Circular production, Carbon reduction and capture, cradle to cradle and sustainable investment. Conducting integral analysis on the costs of production in combination with the environmental impact in order to quantify the hotspots for sustainable and economic improvement.

