In the challenging outlook of today, we expect to be with about 9.6 billion people in 2050. We need 35% more food, 50% more energy and 40% more water. On 25th of September 2015 196 countries worldwide have adopted a set of goals to end poverty, protect the planet and ensure prosperity for all. This drives very different solutions of today’s products and processes of the Chemical Industry. Such transformation is only possible through disruptive technologies and changing value chains. This will disrupt the Chemical Industry, which certainly will still be there in 2050. More interesting question though is who are the players of that Chemical Industry in 2050 and how are they positioned in the value chain.

McKinsey\(^1\) shows in their global forecast that the polymer demand growth from 2016 to 2050 of about 660 million metric tons of polymers will be 50% from mechanical recycling, 35% recovered feedstock, 8% recovered monomer and 7% virgin feedstock.

For Europe this trend will start earlier and because Europe is the region with the lowest growth the recycling options will grow at the expense of virgin feedstock to potentially 50% of the current production. The transformation from a linear to circular economy will transform our value chain and todays waste will be the building block for a sustainable world.

\(^1\) McKinsey December 2018: How Plastics-waste recycling could transform the plastics industry