

LyondellBasell

A perspective on the circular economy

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Freiberg, 26 January 2026



Disclaimer

The statements in this presentation relating to matters that are not historical facts are forward-looking statements. These forward-looking statements are based upon assumptions of management which are believed to be reasonable at the time made and are subject to significant risks and uncertainties. Actual results could differ materially based on factors including, but not limited to, the ability to comply with the terms of our credit facilities and other financing arrangements; the costs and availability of financing; the ability to maintain adequate liquidity; the ability to implement business strategies; availability, cost and price volatility of raw materials and utilities; supply/demand balances; industry production capacities and operating rates; uncertainties associated with the U.S. and worldwide economies; legal, tax and environmental proceedings; cyclical nature of the chemical and refining industries; operating interruptions; current and potential governmental regulatory actions; terrorist acts; international political unrest; competitive products and pricing; technological developments; risks of doing business outside of the U.S.; access to capital markets; and other risk factors. Additional factors that could cause results to differ materially from those described in the forward-looking statements can be found in our financial reports, which are available at www.lyondellbasell.com on the Investor Relations page.

MoReTec: Chemische Recycling-Technologie für komplexe Recyclingmaterialien



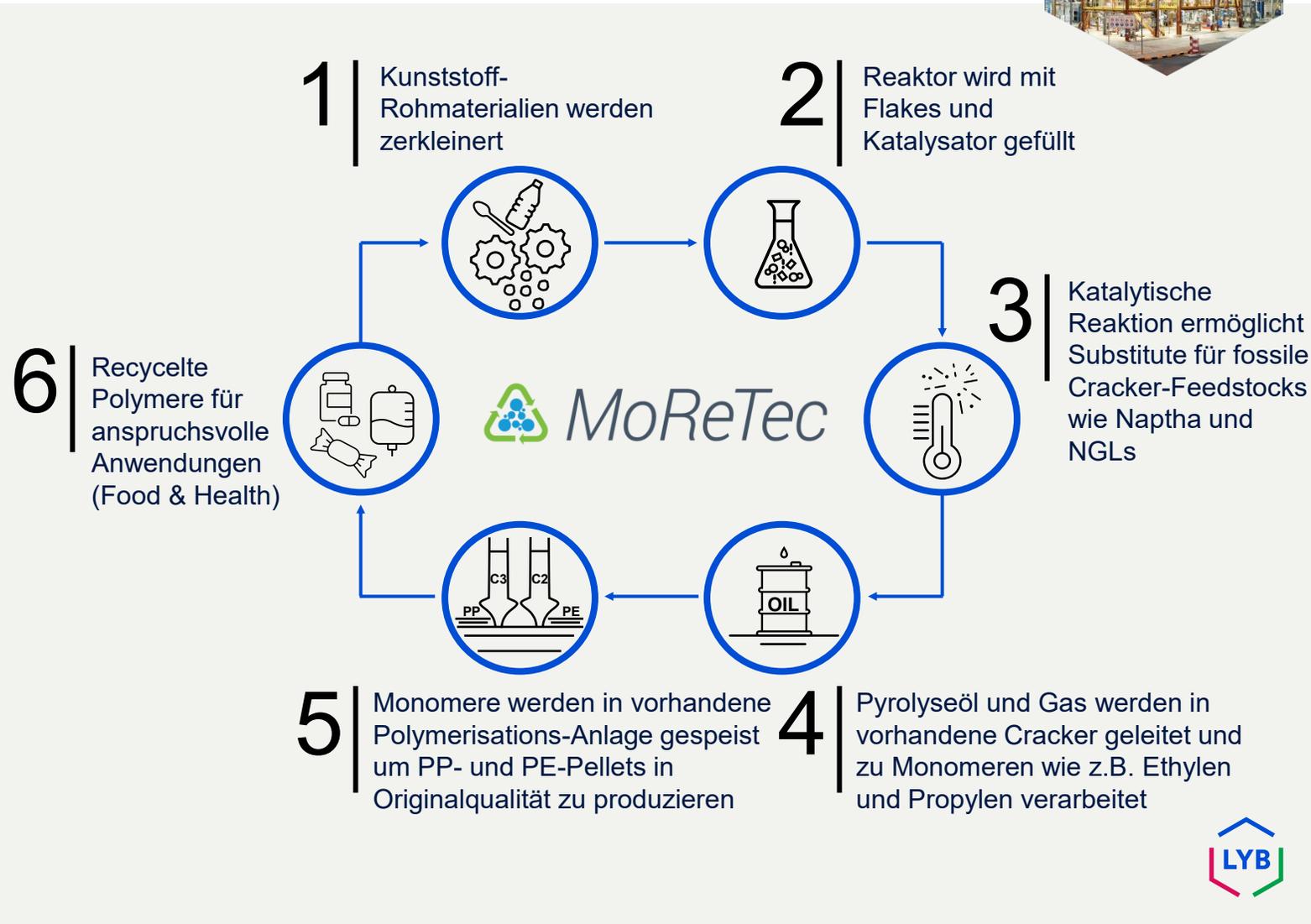
MoReTec bietet einzigartige Vorteile:

~50% geringerer CO₂-Fußabdruck gegenüber Produktion mit fossilem Feedstock¹

>80% plastic-to-plastic-Ausbeute²

Geringerer Energieverbrauch durch einen Prozess, der niedrigere Temperaturen benötigt

Skalierbarer Prozess, der Teil des LYB-Ökosystems wird



1) Feedstocks produced via the MoReTec process (pyrolysis oil and gas) displace fossil-based feedstocks in the olefins cracking process; the stated carbon footprint reduction is based on a comparison of Life Cycle Assessment (LCA) results for (1) pyrolysis oil and gas produced by the MoReTec technology, and (2) fossil-based naphtha feedstock. LCA for pyrolysis oil and gas based on MoReTec pilot plant data. LCA for fossil-based naphtha includes carbon emissions associated with the production of fossil-based naphtha feedstock, plus incineration of the equivalent amount of mixed plastic waste required to produce pyrolysis oil and gas via the MoReTec process.

2) Abhängig von der Qualität des Recycling-Feedstocks. LYB definiert die Ausbeute als den Gewichtsprozentsatz des dem Prozess zugeführten Kunststoffabfalls (mit >85% Polyolefinanteil), der in flüssige und gasförmige Produkte (Pyrolyseöl und Pyrolysegas) umgewandelt wird, die zur Herstellung neuer Polyolefine verwendet werden können.





EU regulation

Substances of concern
in packaging and
automotive
PPWR DAs & ELVR

General framework
on waste
WFD

Recycled content
mandates in automotive
and packaging
ELVR & PPWR

Plastics end-of-
waste criteria
WFD IA

Circularity of electric
and electronic
equipment
WEEE

Recyclability and
design for recycling
PPWR DAs

Circularity of
construction products
CPR

Mass balance for
chemical recycling
SUPD IA & PPWR IA

Reuse targets for transport
packaging, bans of packaging
formats
PPWR

*WFD – Waste Framework
Directive*

*PPWR – Packaging and
Packaging Waste Regulation*

*SUPD – Single Use
Packaging Directive*

*CPR – Construction
Products Regulation*

*WEEE – Waste from
Electrical and Electronic
Equipment*

*ELVR – End-of-Life Vehicles
Regulation*

IA – Implementing Act

DA – Delegated Act

“The circular economy will be a political priority in the next European Commission mandate: let's take this momentum and run with it.” - Ursula von der Leyen presenting her political guidelines for the next European Commission 2024–2029

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Solutions for a better tomorrow



