

# We Go for Zero



SPEAKER

Géraldine Nolens



# Let's Go for Zero

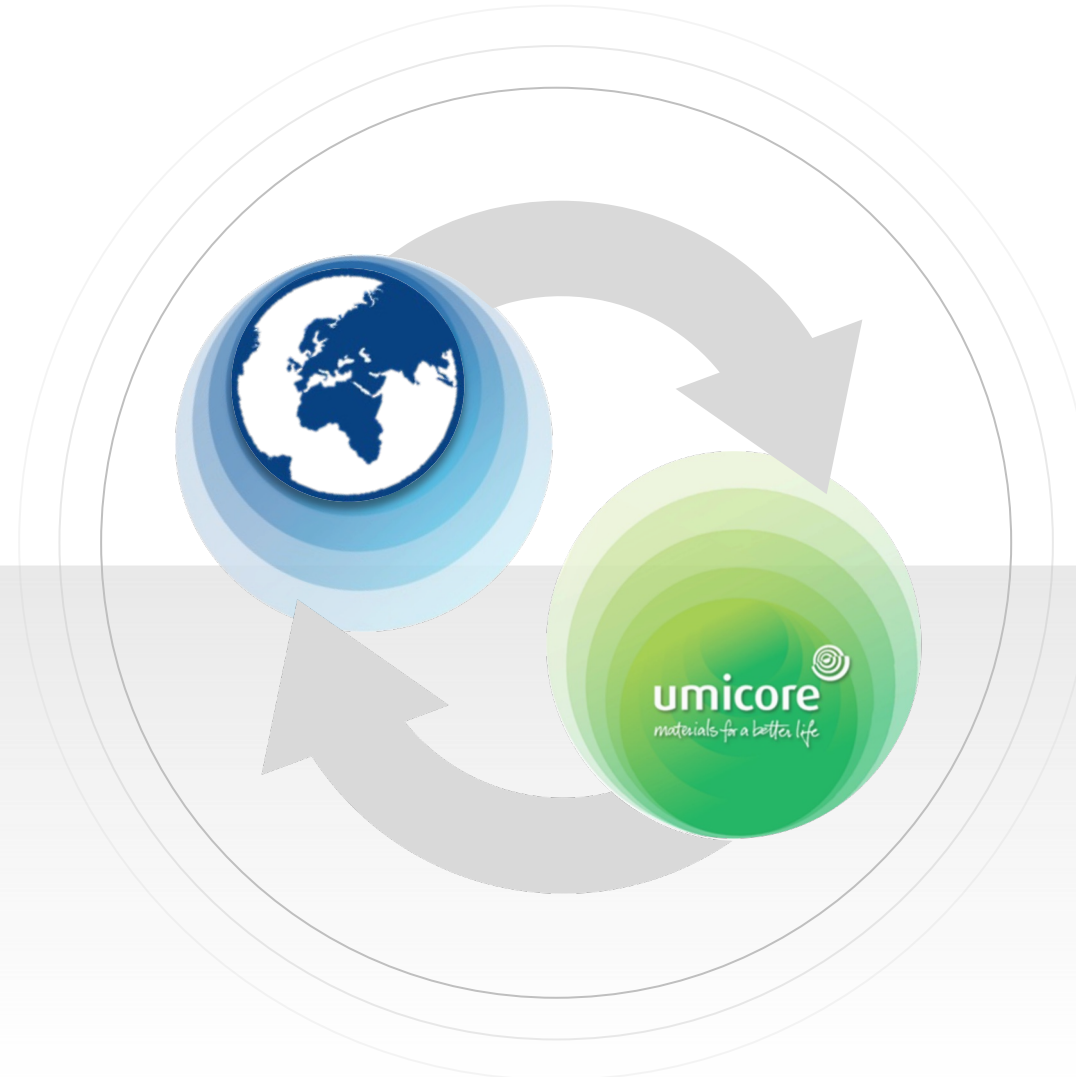
the ambitions behind  
being a **Sustainability  
Champion**



# Net Zero GHG key element in Umicore's Climate Action Plan

## Managing climate's impact on Umicore

*Climate-related physical risks*  
*Climate-related transition risks*



## Managing Umicore's impact on climate

*Scope 1, 2 and 3 GHG emissions*



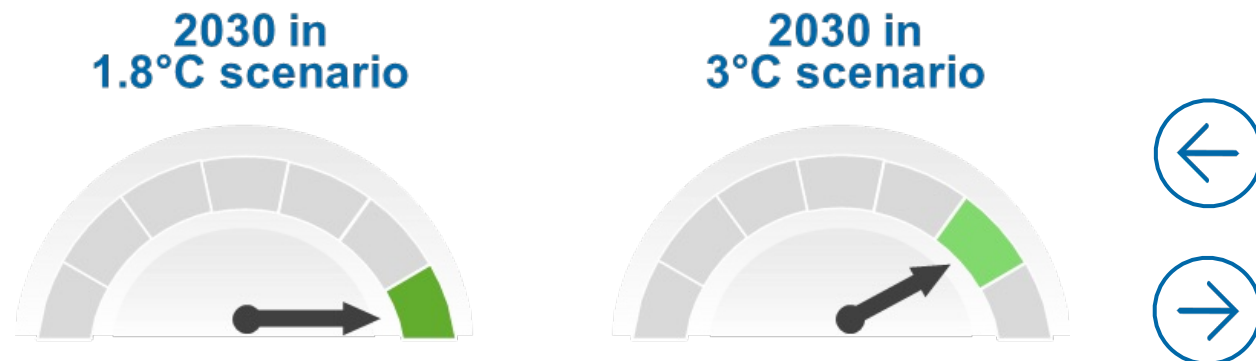
# Managing climate's impact on Umicore



**Building resilience  
through Umicore's  
water stewardship program**  
Focusing on sites operating  
in areas facing water stress



# Uniquely positioned to maximize opportunities in the transition to a low-carbon economy



Business impact by climate scenario\*

**Driving the transition**  
to a low carbon society  
through our products & services

**Driving decarbonization**  
of our value chain  
through how we do business

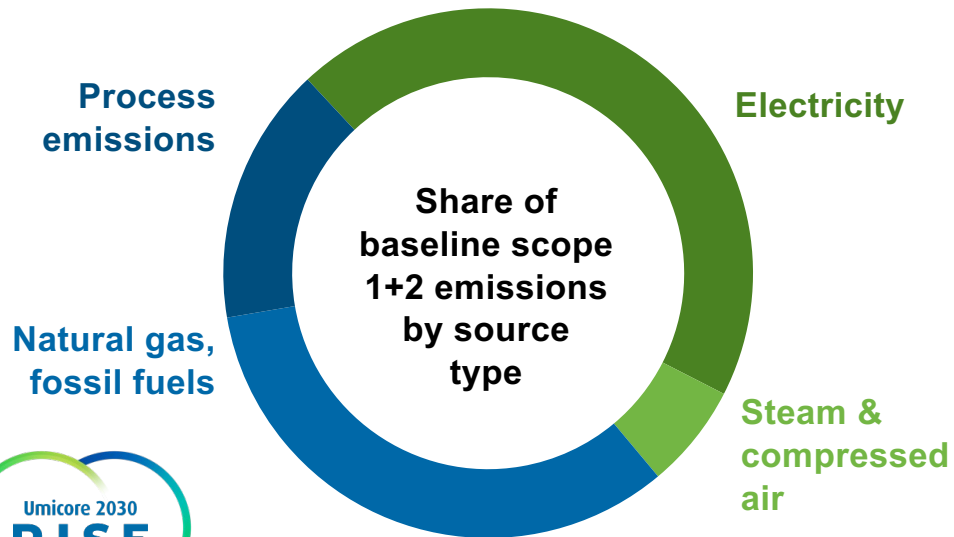
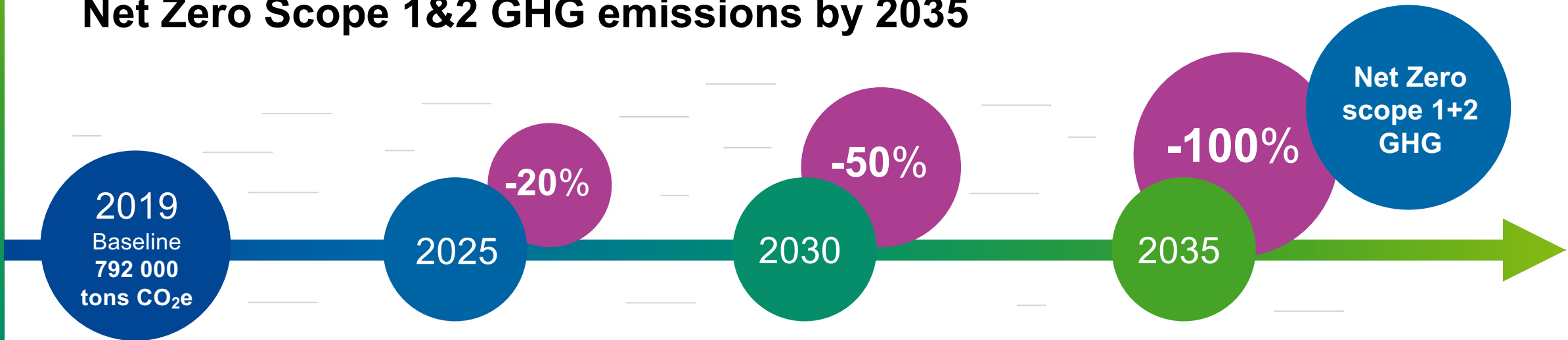
**Delivering the most sustainable solutions**



\* assessment based on Umicore 2021 activity levels by NAICS code modelled in the IEA's climate-based scenarios to 2030

# Minimizing Umicore's impact on climate

## Net Zero Scope 1&2 GHG emissions by 2035



# Leveraging operational excellence & innovation

## To reach our decarbonization goals



**Global goal,  
Local action  
plans**



**Digitalization  
& Industry 4.0**



**Defining  
an internal  
carbon price**



**AVOID**  
emissions

1



**REPLACE**  
emission sources

2



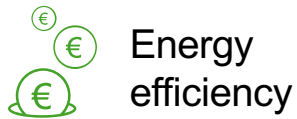
**CAPTURE**  
remaining emissions

3

# Defining the pathway to net zero



## AVOID emissions



Energy efficiency



Heat efficiency



Process innovation



Carbon neutral growth

1



Heat and power cogeneration in Olen



# Defining the pathway to net zero



## REPLACE emission sources



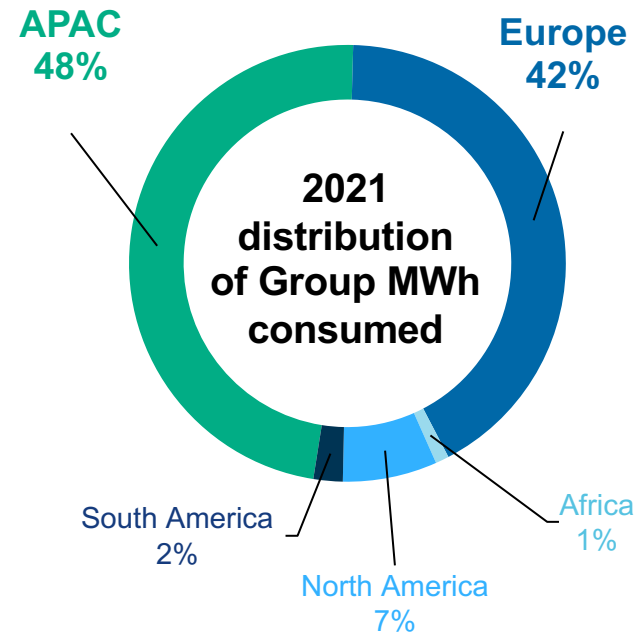
Bio-based Fuels



Renewable electricity on site



Green Power Purchase Agreements



Regional priorities reflect most material sites & projected activity growth

### Europe

Expected **30%** total renewable electricity by end of 2022

### Asia Pacific

**Low visibility of PPA market**  
**Illiquid markets for RECs**  
Aim for **40%** renewable electricity by 2025

**100%** Renewable electricity sourced in Europe by 2025

# Defining the pathway to net zero



## CAPTURE

remaining emissions



GHG capture & utilization



Carbon capture & storage



Strategic partnerships

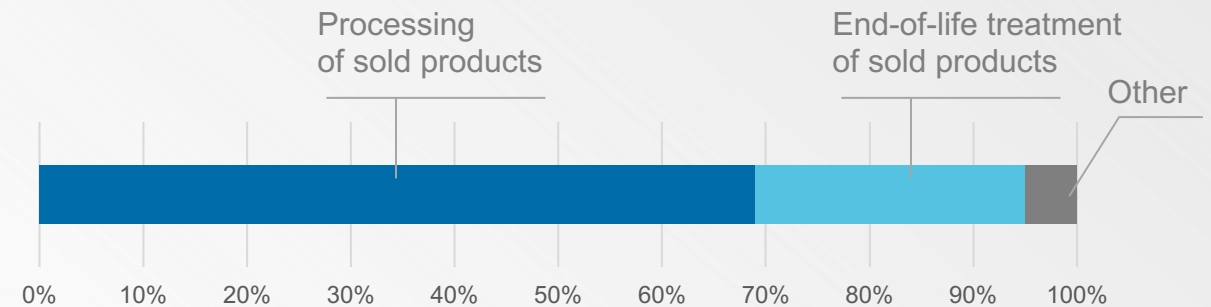
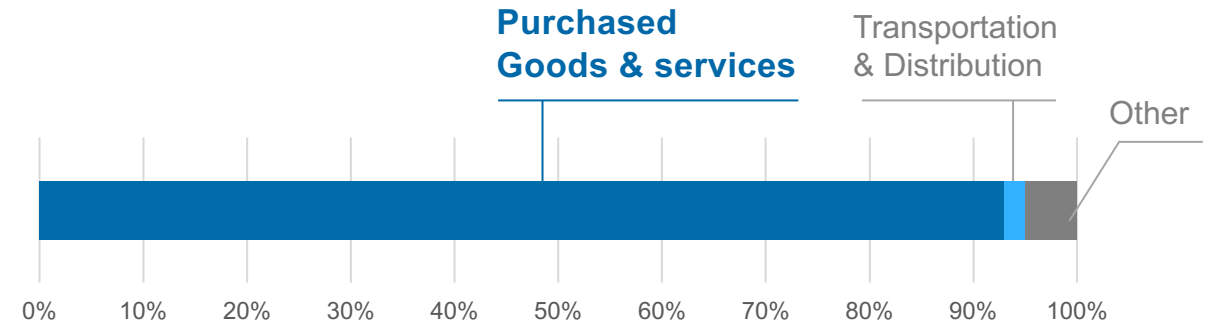
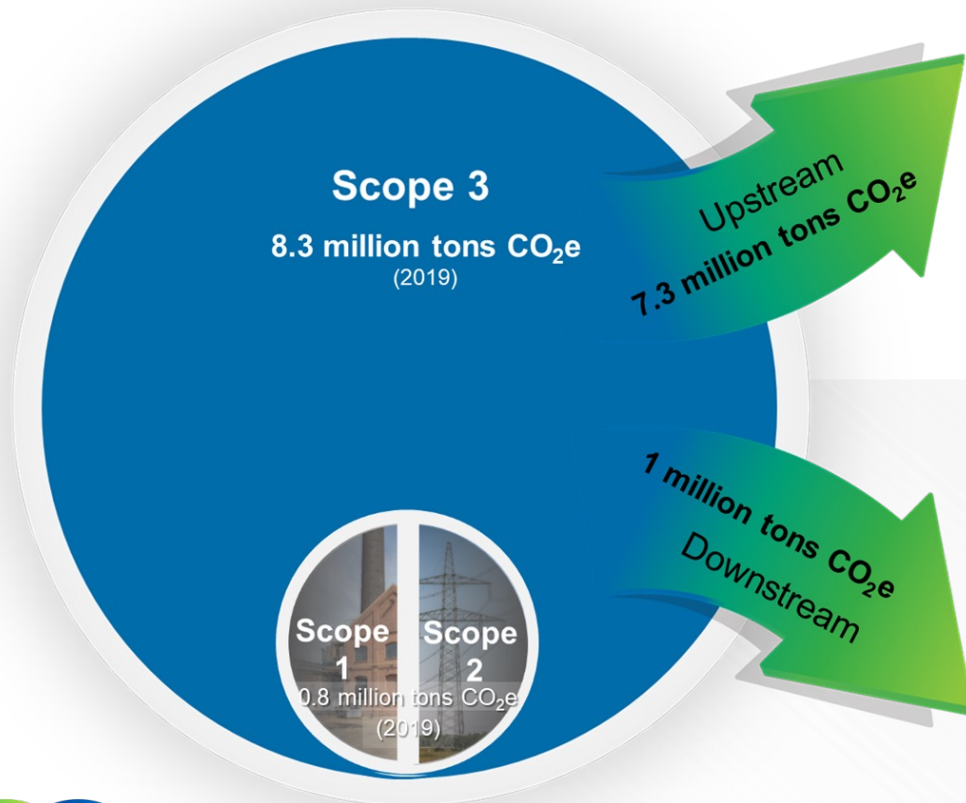
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Landmark industrial-scale nitrous oxide capture plant

# Managing carbon in the value chain

## Overview of the Umicore Scope 3 footprint



*Excluding: use of sold products, downstream leased assets, franchises and investments*



# Prioritizing supply streams to deliver low-carbon battery & catalyst materials

Cobalt, Lithium,  
Manganese,  
Nickel  
**34%**

PGMs  
**27%**

**2019  
baseline**

Auxiliaries  
& services  
5%

Other raw  
materials  
13%

Silver  
8%

Gold  
13%



**2030  
projection**  
"business as usual"  
with expected growth

Cobalt, Lithium,  
Manganese,  
Nickel

Other raw  
materials

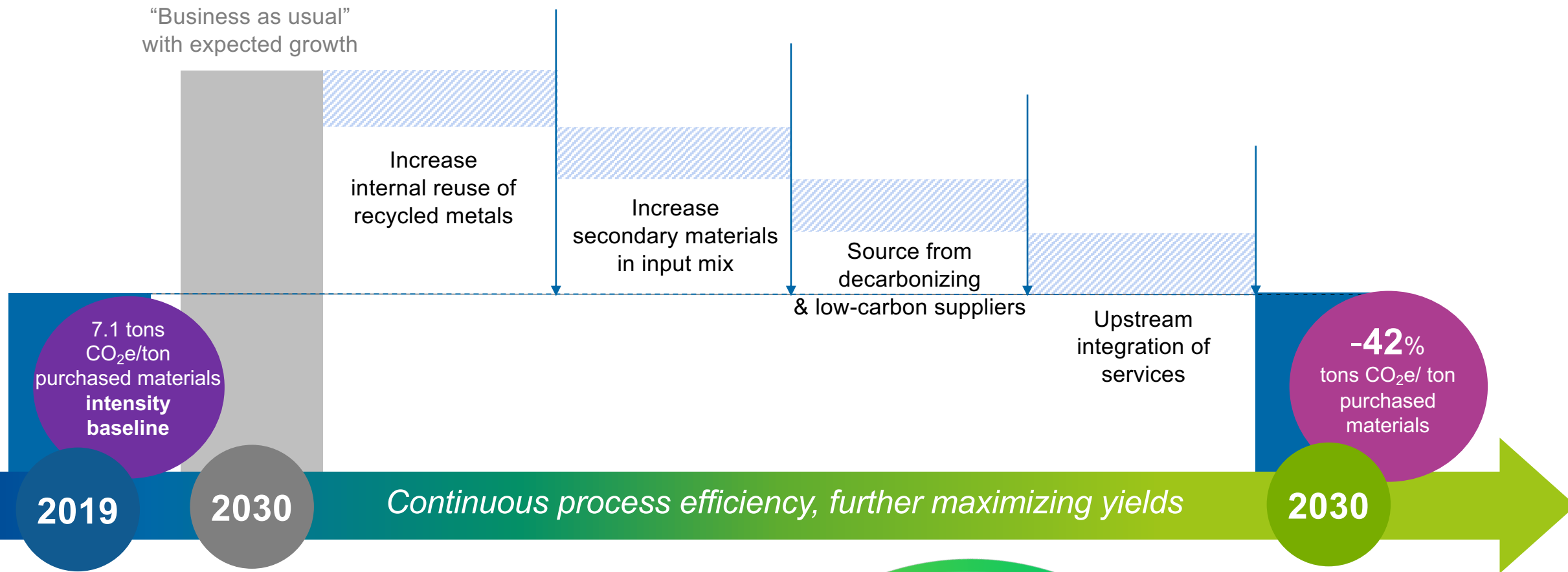
PGMs



**GHG emissions share  
by purchased good type**

**GHG emissions share  
by purchased good type**

# Leveraging our raw materials approach to drive decarbonization in the value chain



Umicore combines technological know-how, performance as sustainability champion, unique position and business model to deliver

**9.7**  
million tons

of GHG emissions avoided through Umicore's e-mobility products in 2021

**1.8**  
million tons

of GHG emissions avoided through Umicore's material input mix & recycling in 2021

**2.8**  
million tons

of avoided NOx emissions from Umicore's clean air technologies in 2021

umicore<sup>®</sup>

materials for a better life