Press conference febeliec

BASF Antwerpen NV

Jan Remeysen_18.03.2021

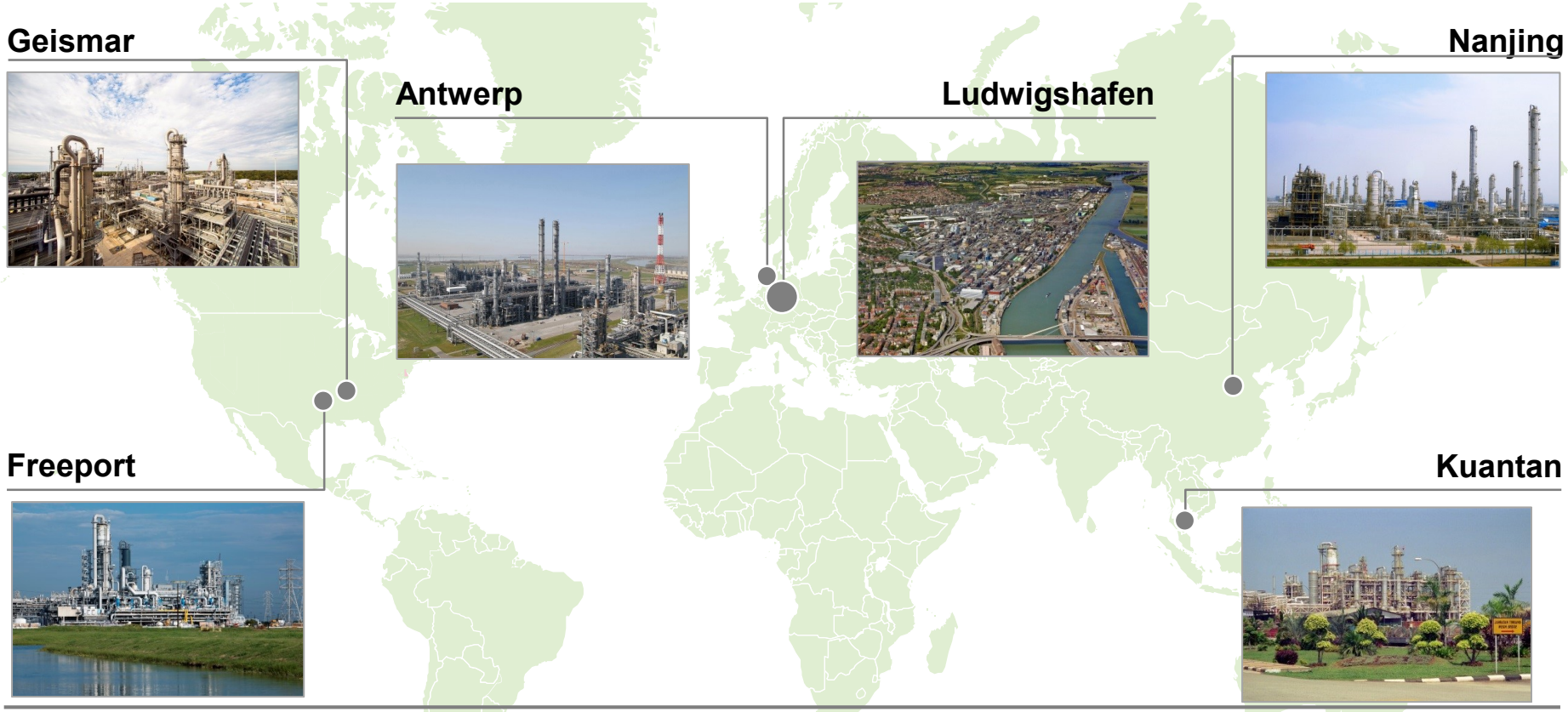
BASF Antwerpen

General facts & figures

Resource efficiency

BASF Verbund is ideal for CO2 emission reduction and overall reduced environmental impact

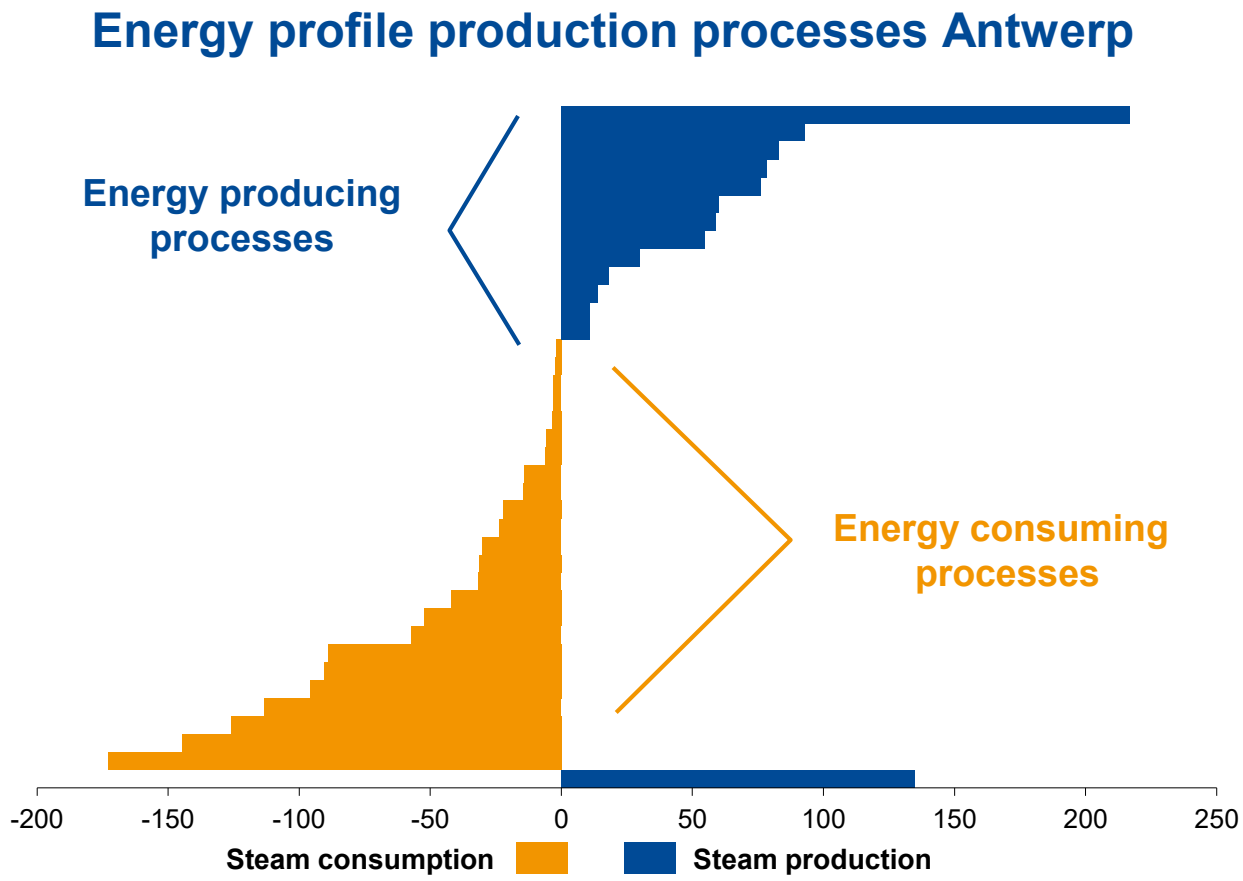
Verbund avoids yearly 6 - 6.5 million tons of carbon emissions (CO2 eq.)



Efficiency drivers: Steam and heat integration, process control and integration
BASF uses fossil raw materials responsibly : 75% of carbon converted to products, 25% consumed for process energy and converted to CO2 equivalents

Process Energy Verbund on Antwerp site

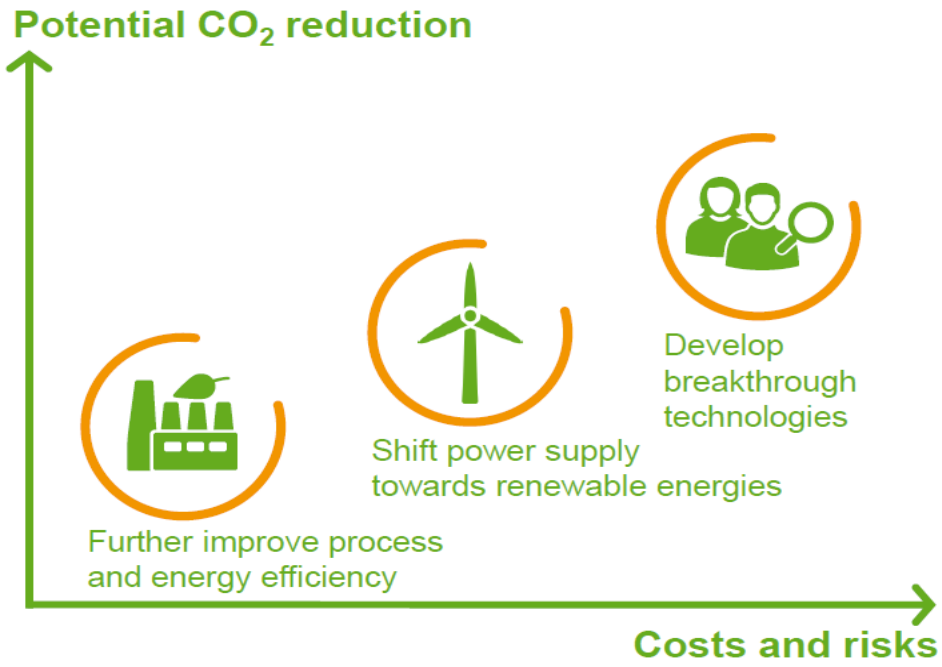
Integrated process heat network



Verbund of energy producing and energy consuming processes reduces net demand for primary energy

BASF Carbon management

Our focus to reduce CO2 emissions



Our Carbon Management

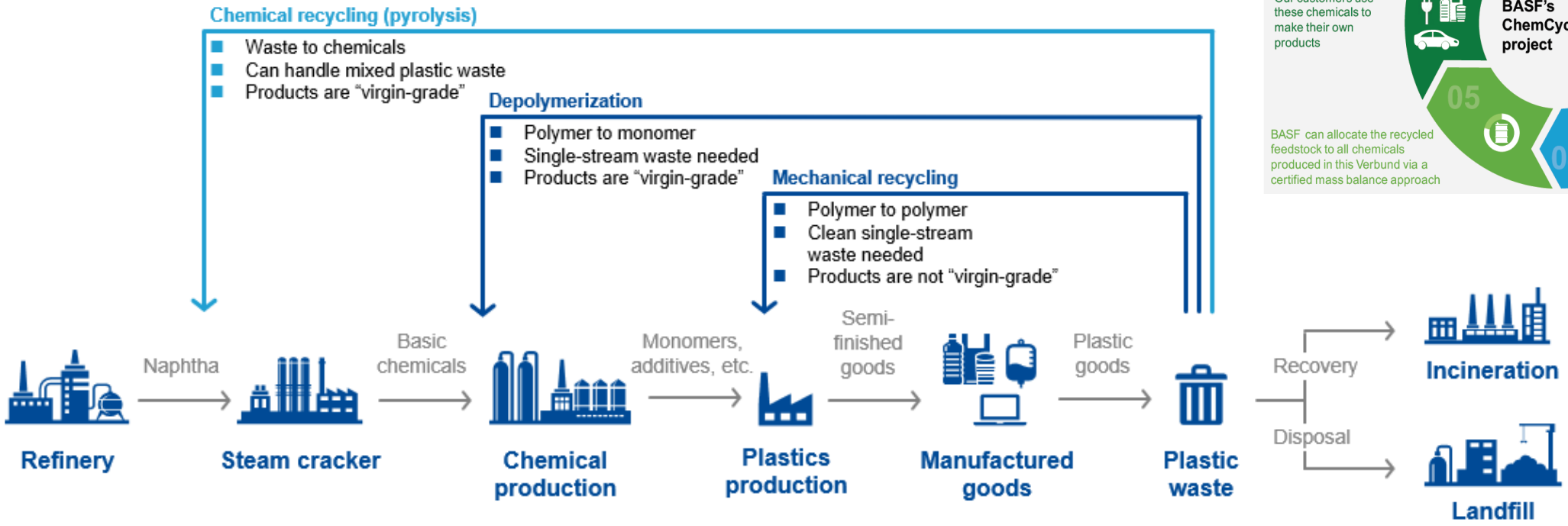
In 2018 we bundled all measures that will help us reach our new climate target 2030 and enable further reductions in the long term, in a global Carbon Management, with the following three core elements:

- Reducing the CO_2 emissions from our production by improving energy and process efficiency
- Increasing the share of renewable energies in our global power supply
- Developing breakthrough technologies for low emission production in a Research & Development program

From a linear to a more circular economy

The role of chemical recycling

Different loops are necessary for a successful transition towards circularity



ChemCycling™ is complementary to mechanical recycling.

Carbon Capture & Storage

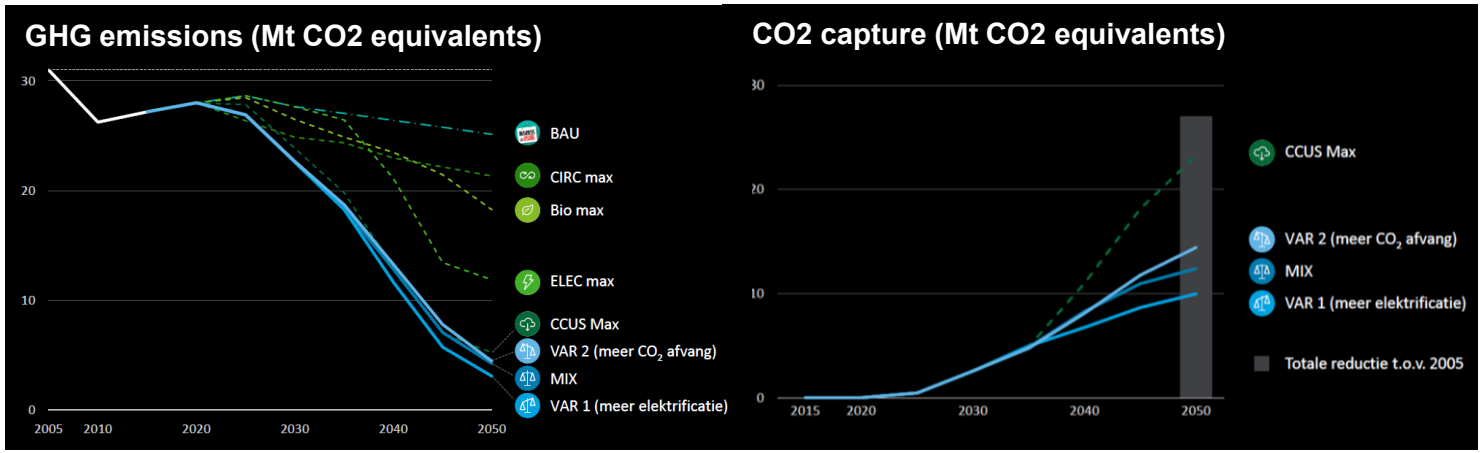
Roadmap study for the Flemish Minister of Economy and Innovation

Towards a carbon circular and CO2-low Flemish industry

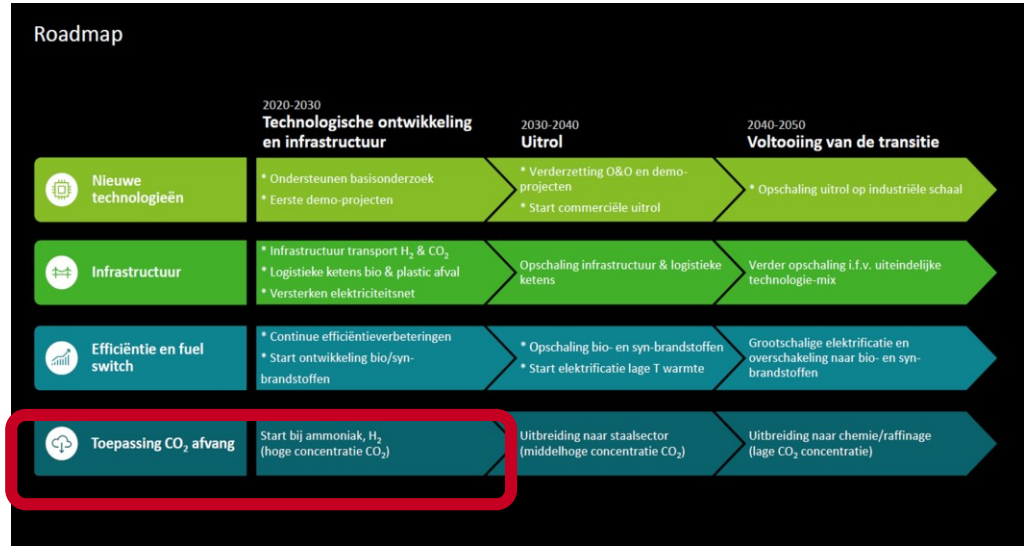
4 Transition pathways have been examined

- **Biomass**
- **Circularity**
- **Electrification & H2**
- **Carbon capture**

Combination is needed to reach significant CO2 reductions CO2 capture plays an important role in each scenario



Focus on high concentrated CO2 (ammonia, H2) in timeframe towards 2030



CCS is a cornerstone of Flemish Industry Climate Roadmap

* Government funding will be necessary due to high technological and commercial risk

Energy cost

Energy invoice is determined by market and regulation (federal and regional)

Regulation

Example electricity invoice

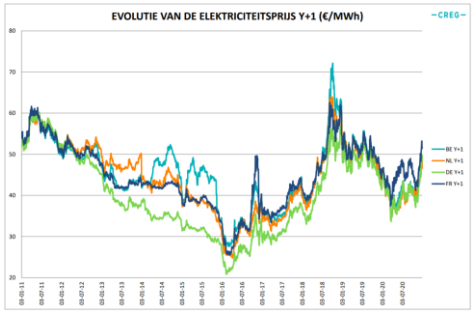
Taxes & Levies

Grid costs

Market price

Market

epexspot, eex, RWE Trading, ENGIE Global Markets, E.ON Energy Trading, EDF, luminus, VATTENFALL

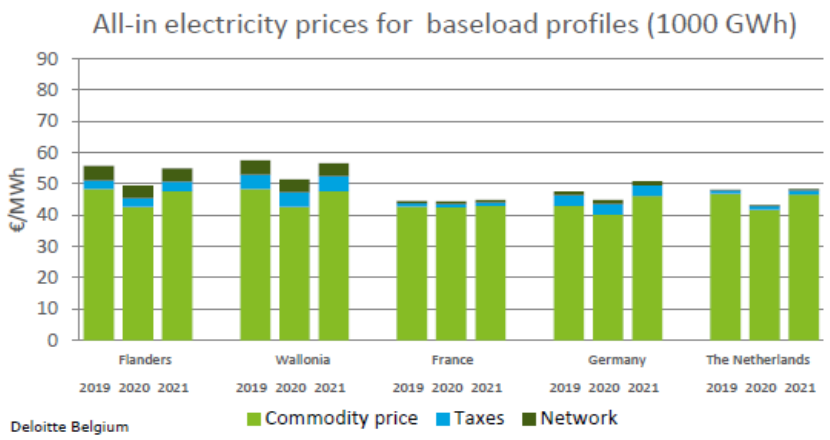


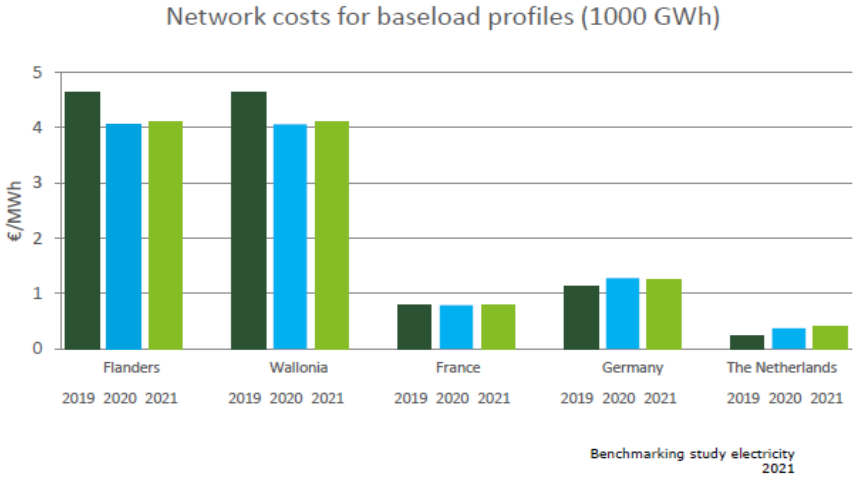
Affordability check: total cost is important

Energy cost – comparison with neighbouring countries

Reducing grid costs is a priority

- Important reduction (up to 90%) of network costs in France, Germany and The Netherlands for specific consumption profiles such as large and stable consumers
  - **Stable**: as from 7000hrs operating hours or
  - **Large and predictable**: > 500 GWh/y or
  - **Countercyclical**: proportionally taking more of the grid during off-peak hours





Limiting federal extra costs in the invoice by reducing transmission grid costs as in our neighbouring countries