

A photograph of a large industrial chemical plant with complex piping, storage tanks, and structural steel. The image is overlaid with a semi-transparent blue gradient.

European chemical closures and investments radar 2022-2025

Radar report 1 – Commissioned by Cefic

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Prepared for external distribution

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Berger



Background and introduction

In January 2025, Cefic published its study on the **Competitiveness of the European Chemical industry**, identifying 11 Mt of announced capacity closures across 2023-2024 in the EU27

Cefic is now launching a systematic, recurring tracker of chemical plant closures and investments as a **key performance indicator (KPI)** for European competitiveness and policy effectiveness

Roland Berger was commissioned by Cefic to report this KPI in **independent Radar reports** – This first report covers announcements made between **1 Jan. 2022 – 8 Dec. 2025¹⁾**, with updates following several times a year

The **scope** includes **publicly announced** capacity closures and investments from **1 Jan. 2022 – 8 Dec. 2025** within the **European chemical industry**. It excludes reorganizations, efficiency programs, and utilization changes¹⁾

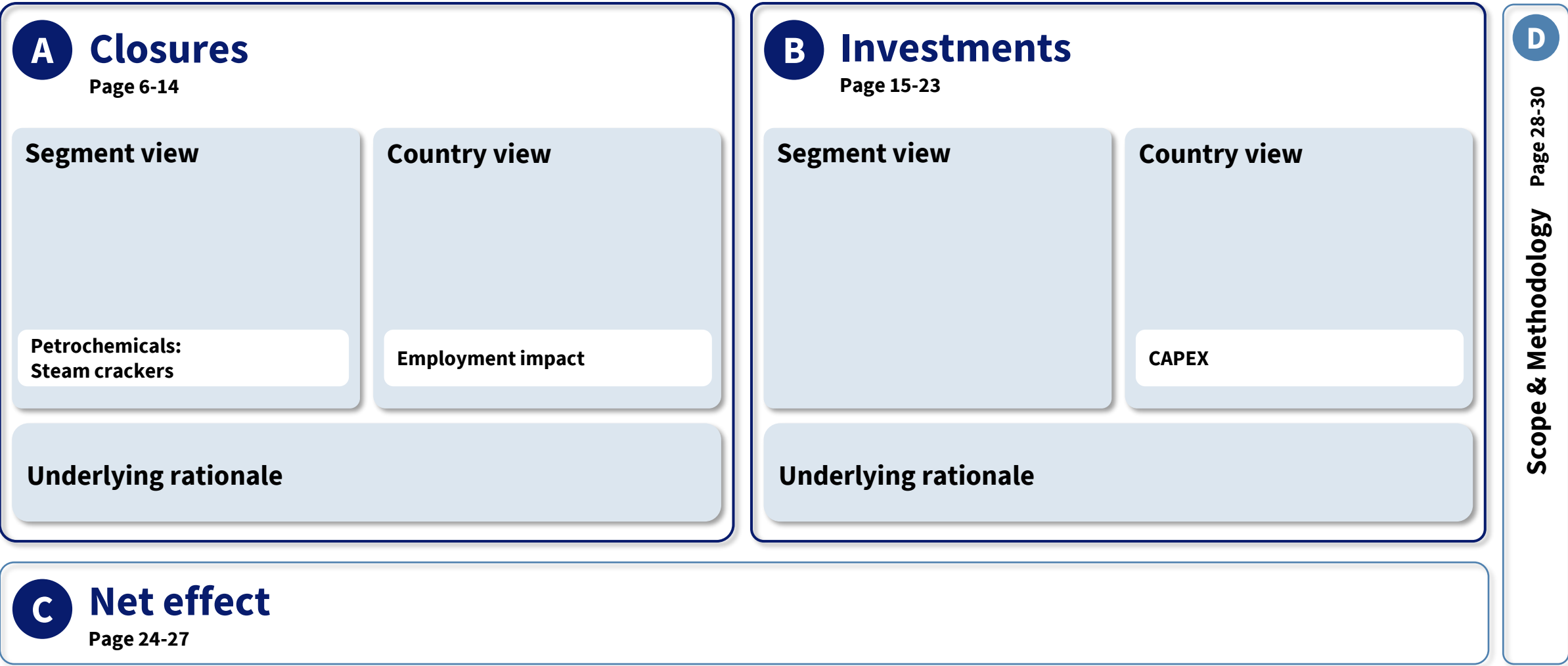
Figures in this report are drawn from a **proprietary database**, built using an **exhaustive Roland Berger public data collection tool** and a **Cefic survey** shared with companies active in chemicals in Europe

This report has been developed in collaboration with Cefic, with special thanks to Director General Marco Mensink, Deputy Director General Sylvie Lemoine, and Director Industrial Policy George Kapantaidakis

1) More details on the scope and methodology can be found in chapter D of this report



Report structure



Executive summary (1/2)

A. Closures

- Between 2022 and 2025YTD, announced closures in the European chemical industry increased **sixfold** from 2.9 Mt to 17.2 Mt per year, and doubled between 2024-25YTD, totaling 37 Mt in 2022-25YTD and representing ~9% of the European chemical production capacity
- These capacity closure announcements have been made mainly within upstream **petrochemicals** (17.8 Mt, 48%), followed by **basic inorganics** (11.7 Mt, 32%), **polymers** (5.4 Mt, 15%), and **specialty chemicals** (2.0 Mt, 5%) – Number of announcements is more evenly split between segments
- Within petrochemicals, ~50% of the total announced capacity closures concern nine steam crackers which corresponds to a **16% net reduction** in European **steam cracking capacity**, all located in integrated chemical clusters, putting these clusters under increasing pressure
- Closure announcements span across Europe, with the largest shares in key chemical industry countries including **Germany** (8.8 Mt, 25%), the **Netherlands** (7.2 Mt, 20%), **UK** (4.5 Mt, 12%), **France** (3.9 Mt, 10%), **Italy** (2.5 Mt, 7%), **Belgium** (2.3 Mt, 6%), **Spain** (1.6 Mt, 4%) and the rest of Europe (6.0 Mt, 16%)
- Across these countries, ~20,000 direct jobs are cited to be affected
- In 49% of the cases, companies indicate **energy cost competitiveness** as the primary rationale for closing, followed by **demand-related considerations** (19%), **overcapacity** (9%), and **regulatory factors** (8%)

B. Investments

- Confirmed investments on the other hand follow a **decelerating trend**, from 2.7 Mt in 2022 to 0.3 Mt in 2025YTD including a **-86% decrease** over the last year, **totaling 7 Mt** over 2022-25YTD and representing ~2% of the European chemical capacity production capacity
- Petrochemicals is the main segment with 3.8 Mt (59%) of confirmed investments in 2022-25YTD, which only partially offsets the -17.8 Mt closures
- The largest confirmed capacity investments are in **Belgium** (2.4 Mt, 36%), **Germany** (0.8 Mt, 12%), and **France** (0.4 Mt, 6%), accounting for ~60% of the total
- Similarly, **confirmed investment CAPEX has decreased by a factor of five** from EUR 7.6 bn in 2022 to EUR 1.5 bn in 2025YTD – Germany (EUR 1.4 bn, 10%) is below France (EUR 1.7 bn, 12%) and the Netherlands (EUR 1.5 bn, 11%) despite having Europe's largest chemical industry
- Investment themes include projects related to the **battery value chain** (EUR 1.9 bn, 14%), **emission reduction** (EUR 1.9 bn, 14%), and **recycling** (EUR 1.5 bn, 11%) although, these themes follow the overall decreasing trend

Executive summary (2/2)

C. Net effect

- Considering both announced closures and confirmed investments over 2022-25YTD, there is a **growing asymmetry potentially leading to a net capacity reduction of -30.2 Mt**
 - This asymmetry could be understated, as investments typically have longer time horizons (2-5 years) while closures are nearer-term (1-2 years)
- Countries with the largest number of closures are not those attracting the main investments, resulting in a growing **imbalance in key countries** including **Germany (-8.0 Mt)**, the **Netherlands (-6.9 Mt)**, **United Kingdom (-4.2 Mt)**, **France (-3.5 Mt)** and **Central and Eastern Europe (-3.4 Mt)** – Belgium as the exception, has a relatively neutral balance (+0.1 Mt), related to a selection of relatively large projects
- Segments most affected by closures are not seeing similar levels of investments, resulting in an imbalance in the **upstream petrochemicals (-14.0 Mt)**, followed by **basic inorganics (-11.3 Mt)** and **polymers (-4.8 Mt)** segment, whereas **specialty chemicals show a more balanced outcome (-0.3 Mt)**, supported by investments in the battery value chain

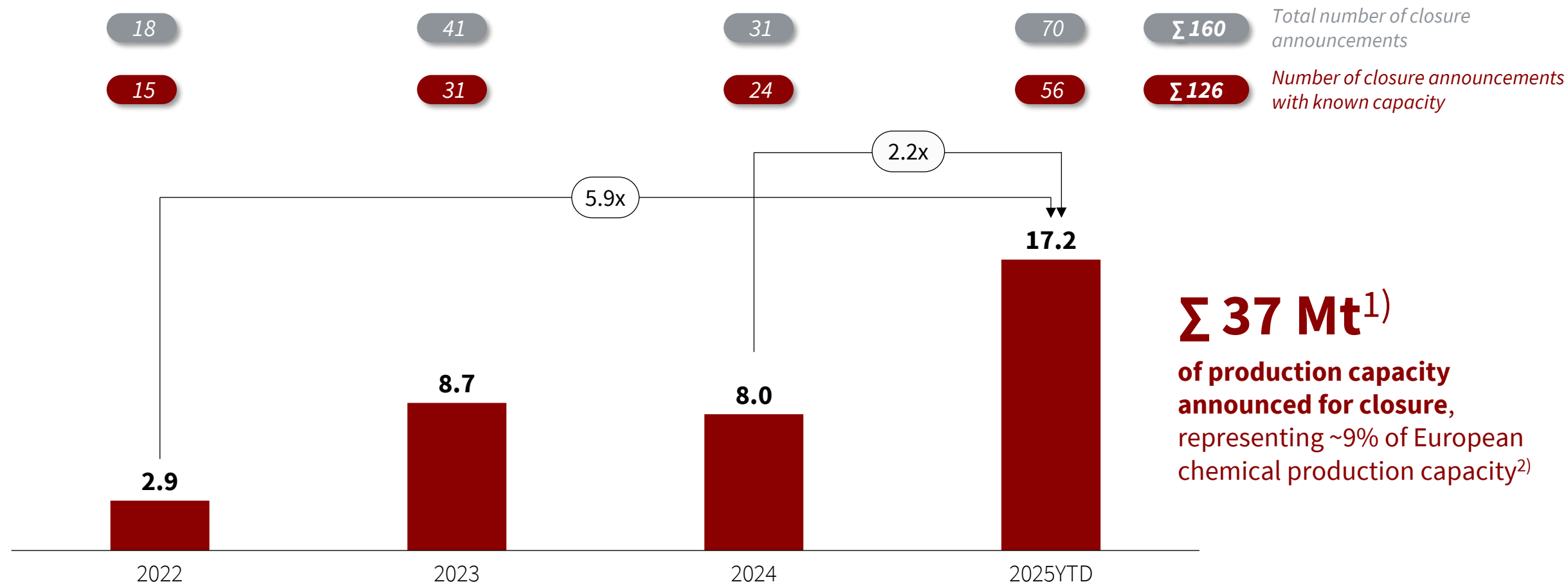


A.

Announced chemical capacity closures in Europe

Between 2022 and 2025YTD, the capacity announced for closure has increased sixfold from 2.9 Mt in 2022 to 17.2 Mt in 2025YTD, and doubled (2.2x) in the last year

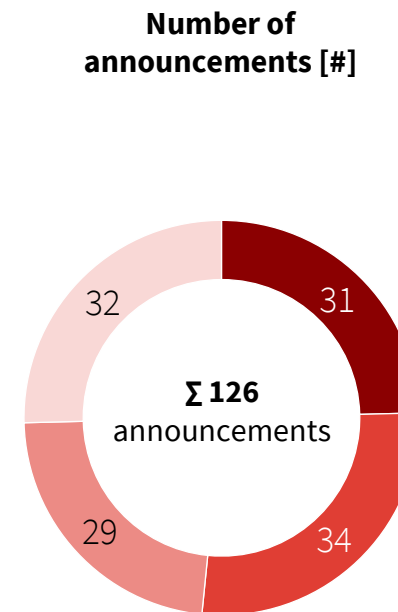
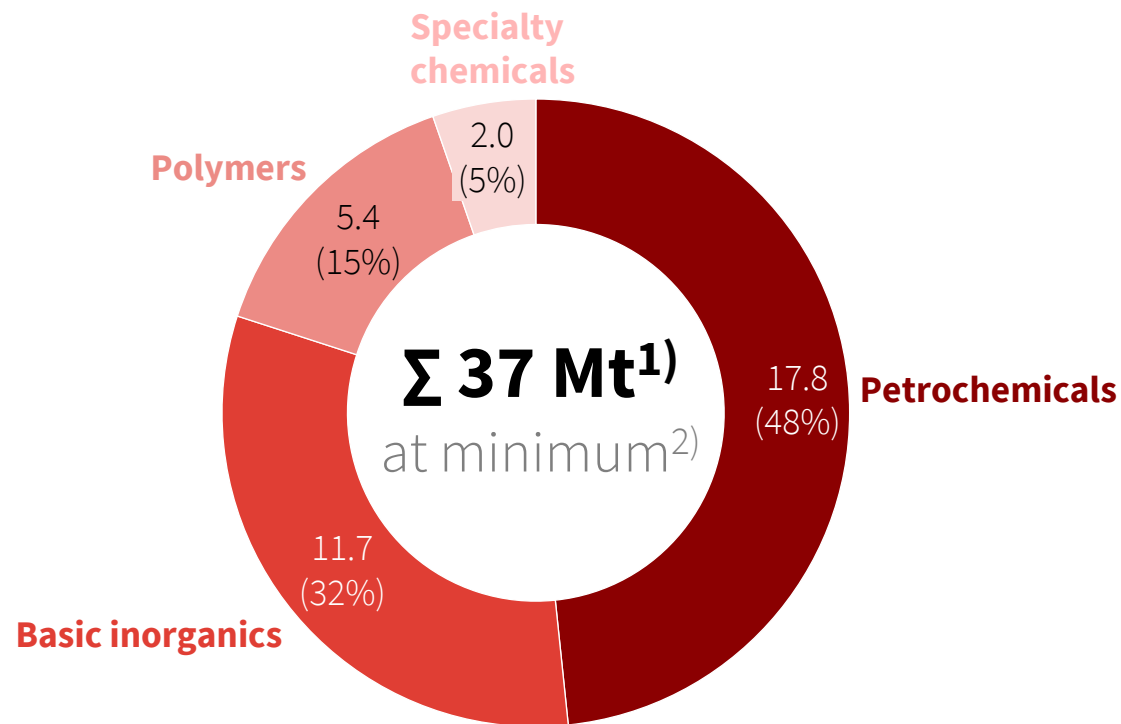
European chemical production capacity announced for closure, 2022-25YTD [Mt p.a.]



1) 32 Mt when considering EU27; 2) ~9% out of 417 Mt production capacity

With 48% of the capacity announced for closure, the petrochemical segment is the most exposed, followed by basic inorganics (32%) and polymers (15%)

European chemical production capacity announced for closure by segment, 2022-25YTD [Mt]



Insights

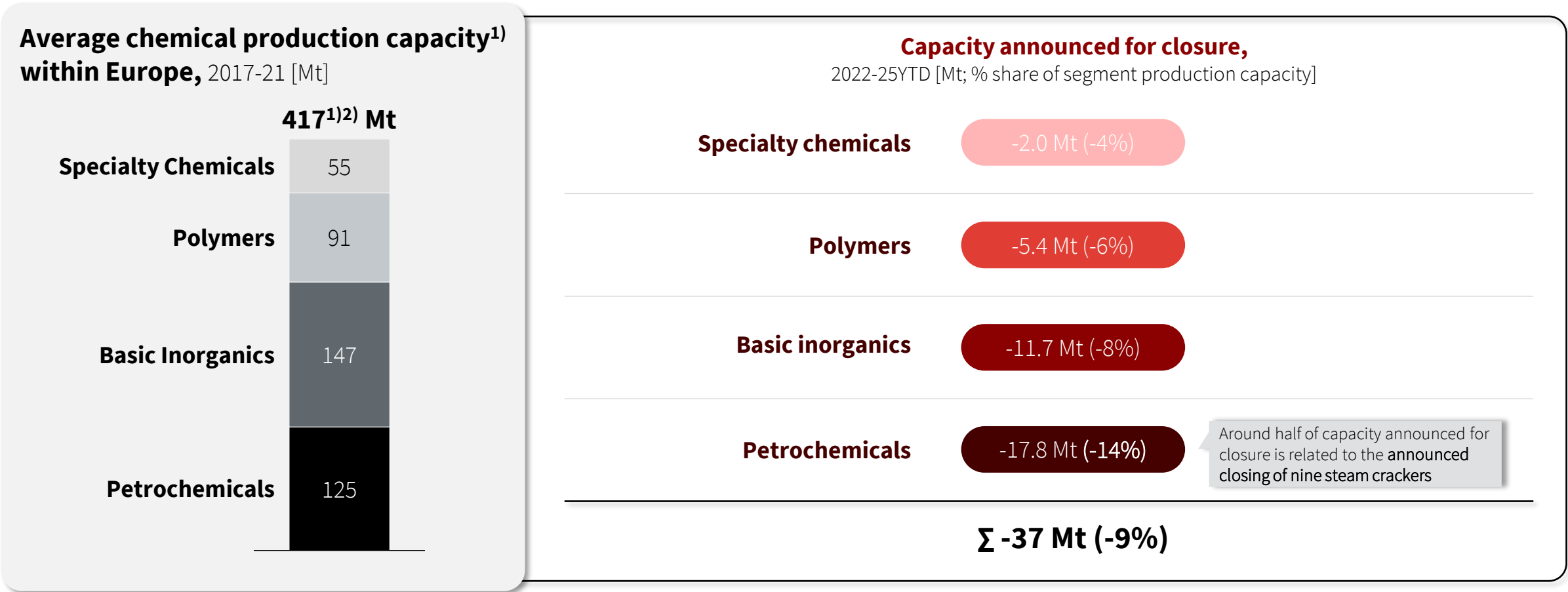
- Closures are announced across all the segments, with a relatively even distribution in terms of number of announcements (29-34)
- In terms of capacity announced for closure, the petrochemical segment stands out at 48% of the total
 - Around half of this is explained by announced closing of nine steam crackers

■ Petrochemicals ■ Basic inorganics ■ Polymers ■ Specialty chemicals

1) 32 Mt when considering EU27; 2) Minimum, considering ~20% of closures did not report capacity, although these closures typically concern smaller assets;

Announced closures represent 9% of European chemical production capacity, with petrochemicals' capacity relatively more impacted at -14% of production capacity

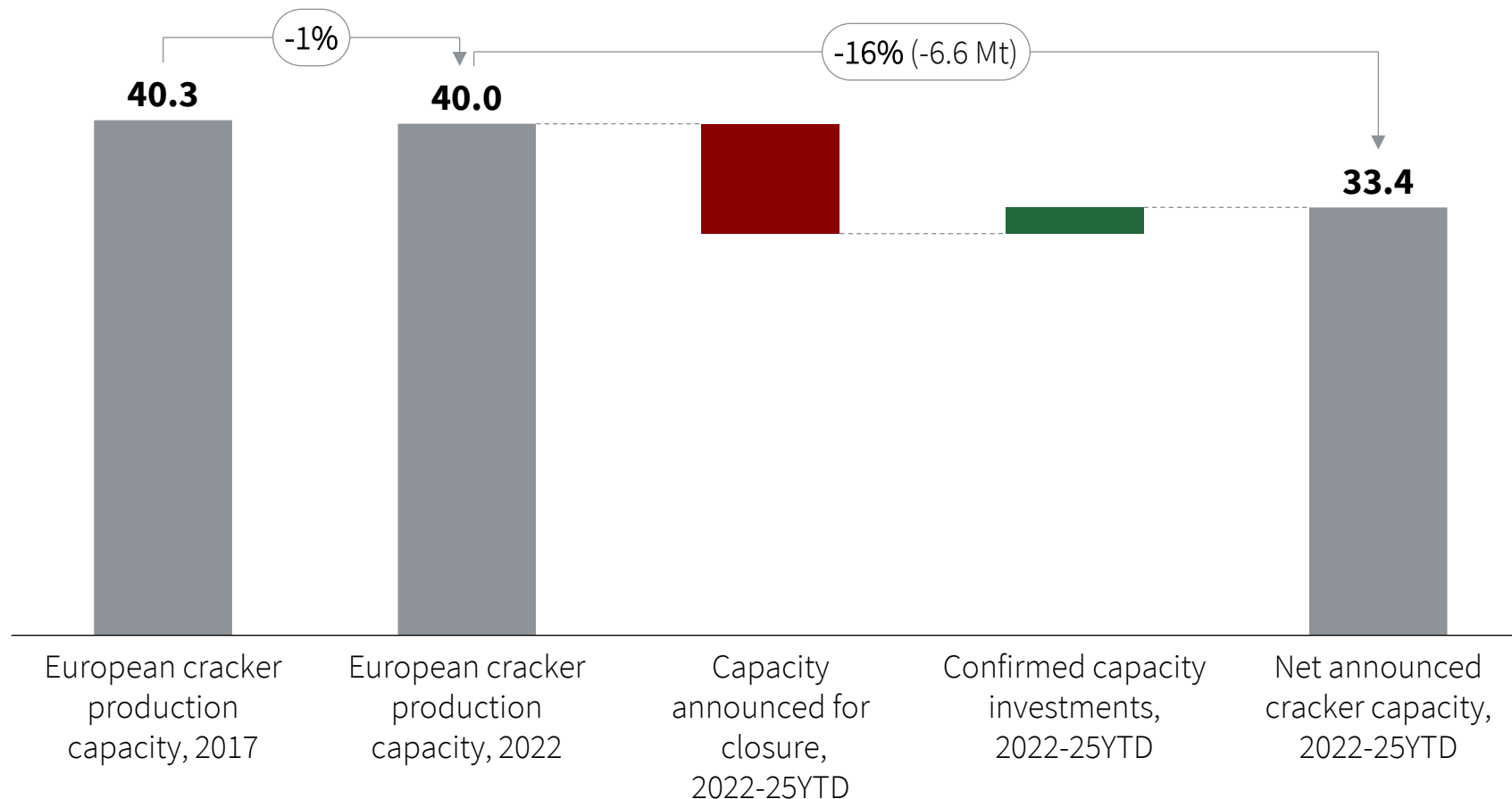
Chemical production capacity and announced impact, 2017-25YTD [Mt; % of production capacity]



1) Based on Eurostat statistics on sold production and utilized manufacturing capacity of NACE code 20 (manufacture of chemicals and chemical products) averaged over 2017-2021, excluding Industrial gases, consumer chemicals, biofuels and biodiesels as these were not tracked in the closure and investment database; 2) Discrepancy with sum of the parts due to rounding

European steam crackers are particularly affected, with a net 16% announced capacity reduction, all located in clusters, putting integrated clusters under pressure

Net announced steam cracker capacity, 2022-25YTD [Mt ethylene, propylene, and butadiene]

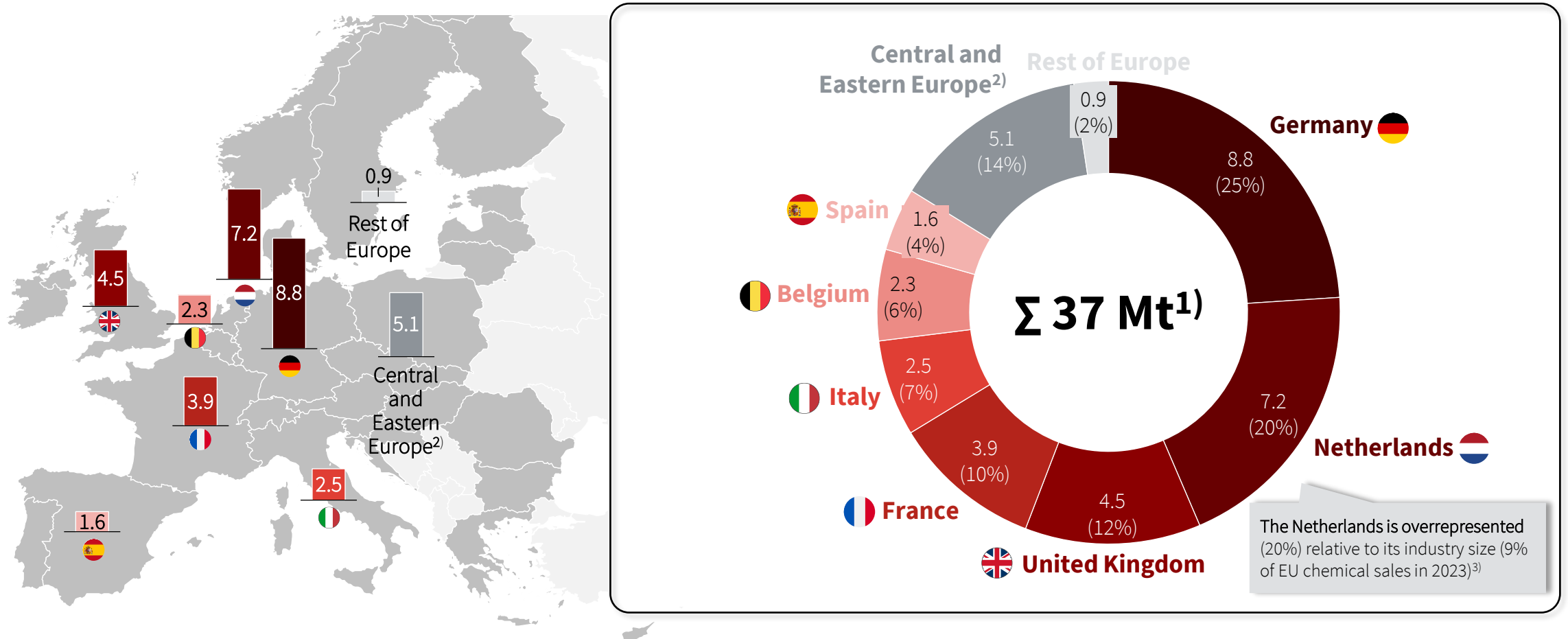


Insights

- The net 16% of announced capacity reduction between 2022-2025YTD is significantly higher compared to the 1% capacity reduction observed in 2017-2022
- Closures concern nine steam crackers, which are **all located in integrated chemical clusters** and are therefore putting these clusters under pressure

While closures are announced across Europe, Germany and the Netherlands account for ~45% of the capacity announced for closure

Overview of announced closures by country, 2022-25YTD [Mt]

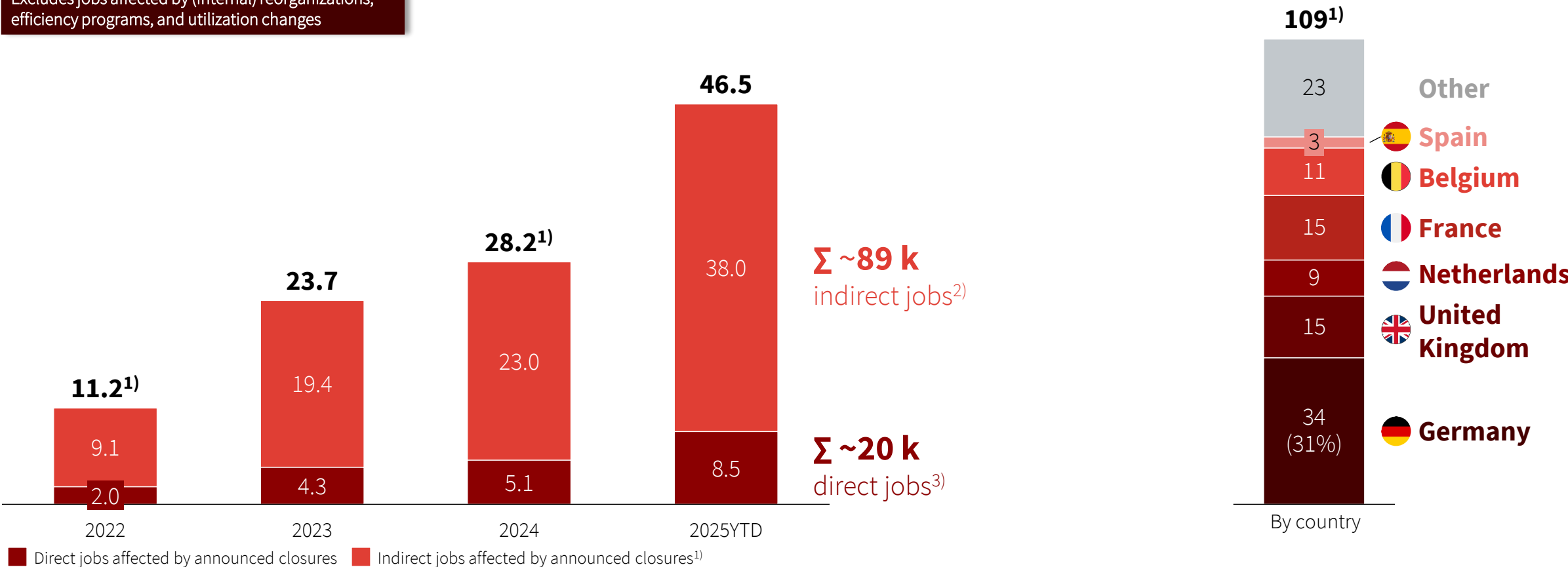


1) 32 Mt when considering EU27; 2) Includes announcements in Croatia, Czech Republic, Estonia, Hungary, Lithuania, Poland, Romania, Slovakia; 3) Sales figures from Cefic Chemical Trends Report

~20,000 direct jobs and ~89,000 indirect jobs are cited to be affected across Europe, including all major chemical countries

Impact of announced closures on European employment, 2022-25YTD [# k headcount]

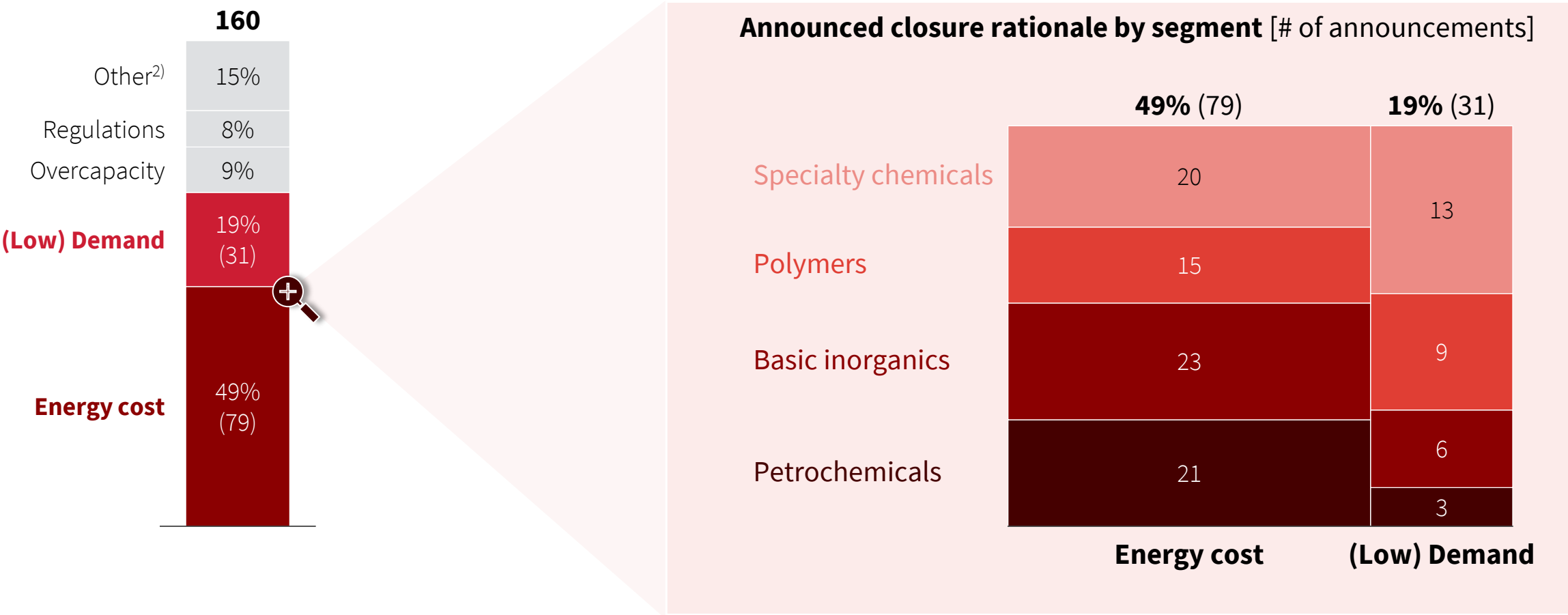
Excludes jobs affected by (internal) reorganizations, efficiency programs, and utilization changes



1) Minor discrepancies with sum of parts due to rounding; 2) To estimate the number of indirect jobs affected, the number of direct jobs was multiplied by a "Type II" multiplier of 4.5, which is the average of Germany (3.8), France (4.0) and Belgium (5.6) based on OECD and Oxford Economics; 3) Not taking into account internal reorganizations, efficiency programs, and utilization changes that may affect the number of direct jobs

Lack of energy cost competitiveness is the dominant closure rationale, cited in 49% of announcements, a pattern consistent across all segments

Announced closure rationale by segment¹⁾, 2022-25YTD [# of announcements]



1) Based on the rationale for closure as mentioned in public announcements, if multiple reasons were given, the primary reason was selected; 2) Includes feedstock costs and strategic decisions

Key takeaways – Closures

Overall

- Since 2022, the production capacity that is announced for closure has increased **sixfold, from 2.9 Mt in 2022 to 17.2 Mt in 2025YTD** (or from 15 to 56 announcements) and a **total of 37 Mt at minimum¹⁾ over 2022–25YTD** (126 announcements), **representing ~9% of European chemical production capacity**

Segment and country view

- The **petrochemical segment is the most exposed with 48%** of all announced closure capacity, followed by basic inorganics (32%) and polymers (15%) while the share in specialty chemicals is relatively low (5%)
- With 29-34 closure announcements per segment, the number of announcements is more evenly spread between segments
- Within petrochemicals, **around half of the capacity announced for closure consists of nine steam crackers**, which are **all located in integrated clusters**, putting the **downstream industries in these clusters under pressure**
- Closures have been announced across Europe, including the key chemical industry countries Germany (25%), the Netherlands (20%), United Kingdom (12%), France (10%), Italy (7%), Belgium (6%), Spain (4%), that make up 84% of the capacity announced for closure – **The Netherlands is overrepresented** (20%) relative to its industry size (~9% of EU chemical sales in 2023)²⁾

Employment impact

- ~20,000 direct jobs³⁾ and ~89,000 indirect jobs are at risk throughout Europe** including all key chemical-producing countries, with Germany experiencing the highest impact at ~34,000 (31%) direct and indirect jobs

Underlying rationale

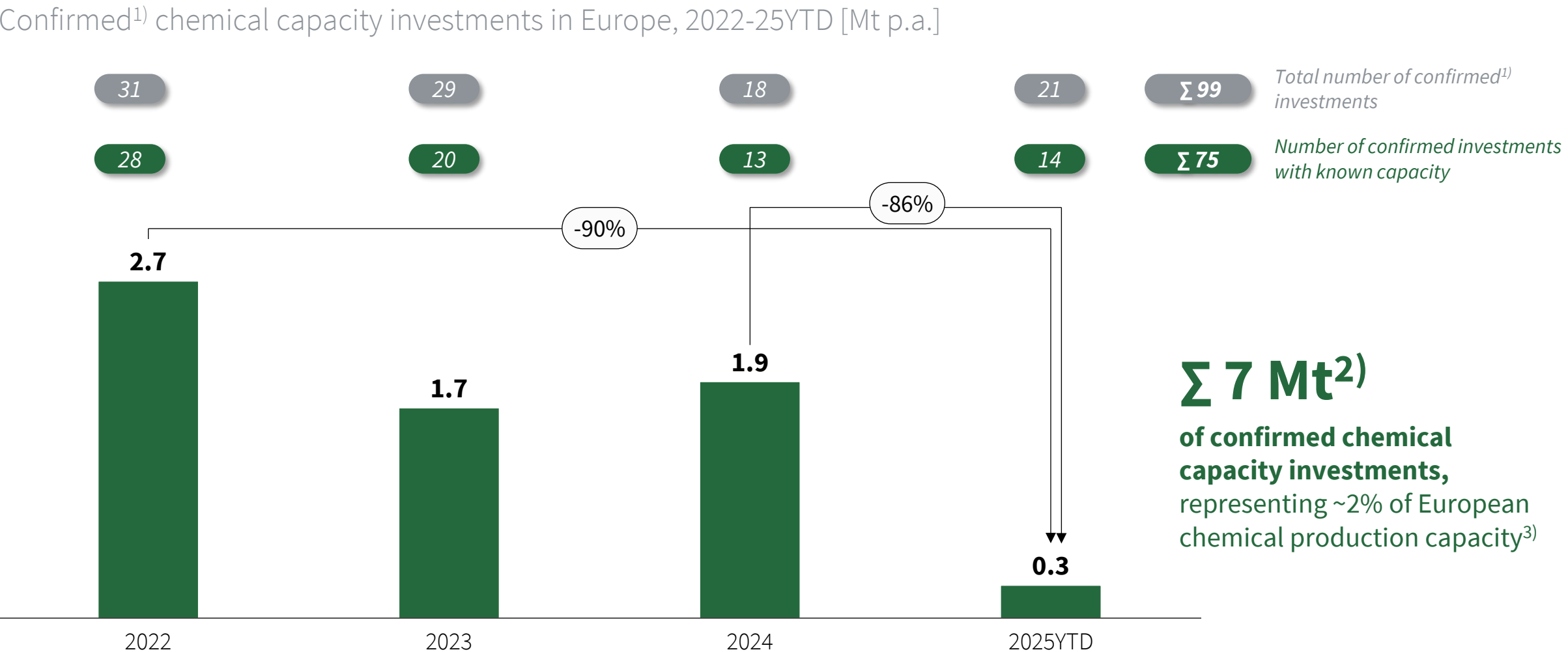
- Lack of energy cost competitiveness is the dominant closure rationale**, cited in 49% of announcements, a pattern consistent across all segments
- In addition to energy cost, the other main reasons cited are **low demand** (19%), **overcapacity** (9%), and **regulations** (8%)

1) In reality, this number is possibly higher considering the affected capacity of ~20% of the closure announcements was not available, although these typically concerned smaller assets; 2) Sales as reported in the Cefic Chemical Trends Report; 3) Not taking into account internal reorganizations, efficiency programs, and utilization changes that may affect the number of direct jobs



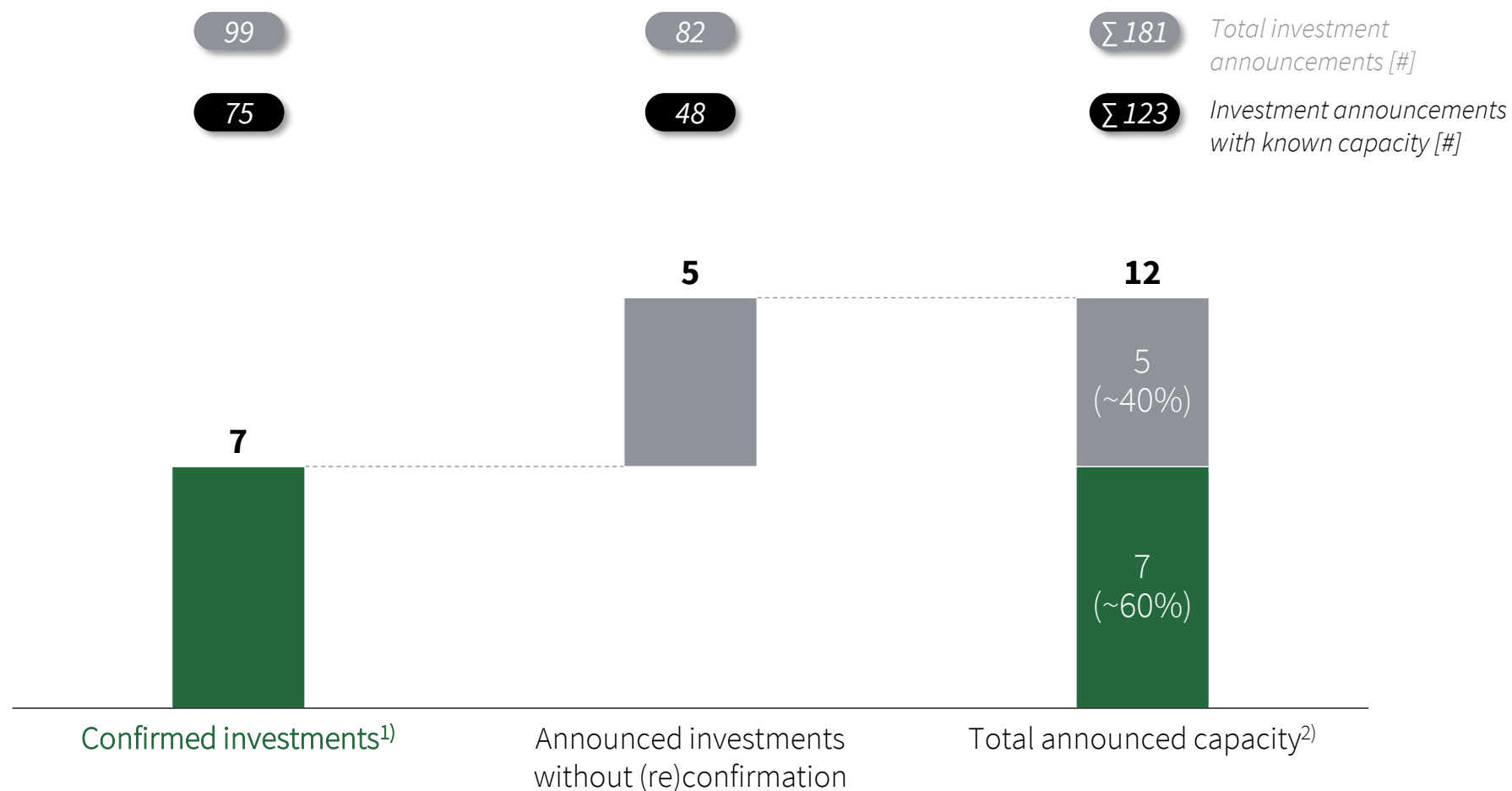
B.
**Confirmed investments in
chemical plants in Europe**

In contrast to the accelerating closures, confirmed investments have slowed, decreasing from 2.7 Mt in 2022 to 0.3 Mt in 2025YTD, totaling ~7 Mt over 2022–25YTD



In addition to the 7 Mt of confirmed investments, an additional 5 Mt of capacity investments have been announced, but have not been formally confirmed (yet)

Confirmed¹⁾ vs. unconfirmed capacity investments in Europe, 2022-25YTD [Mt]



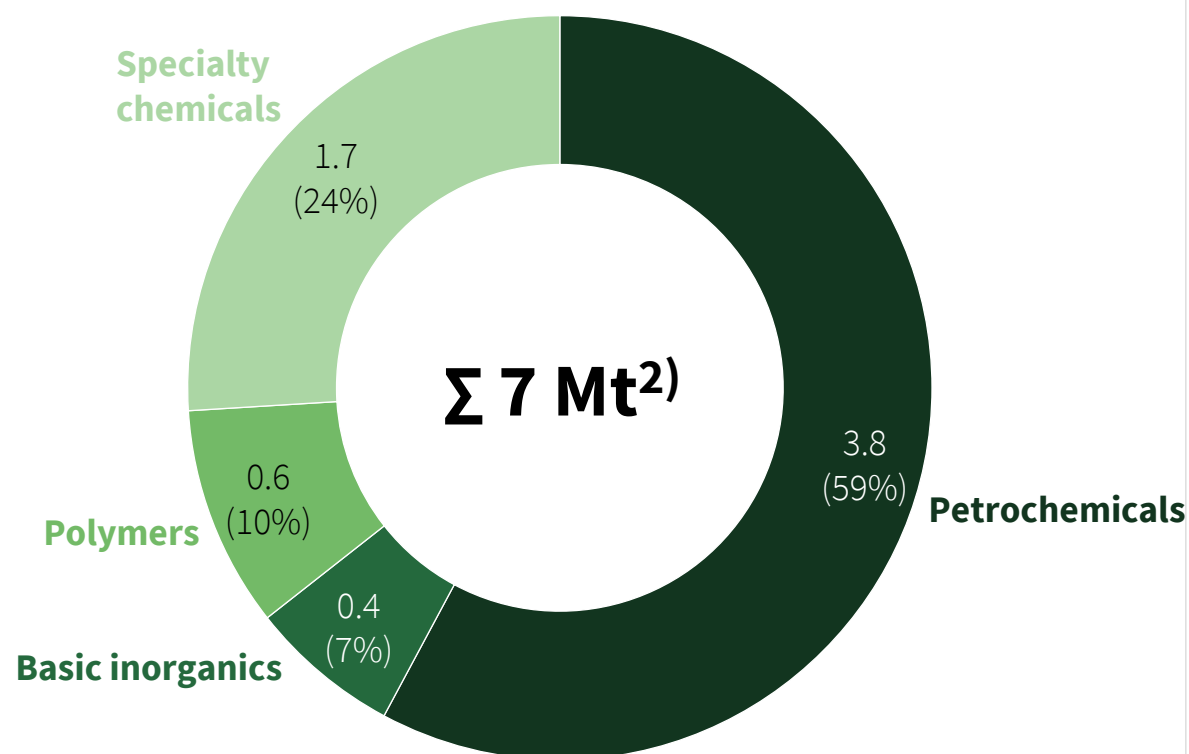
Insights

- Capacities are based on public announcements of companies
- 7 Mt of capacity investments have been publicly confirmed¹⁾
- 5 Mt of capacity investments have been announced, but have not been confirmed yet by a publicly announced final investment decision (FID), construction start, or completion
- Not all investment announcements necessarily materialize as announced, and the resulting production capacity may differ from the stated plans

1) Confirmed investments include investments that are formally approved (FID), construction start announced, or operating; 2) Excludes any canceled investments

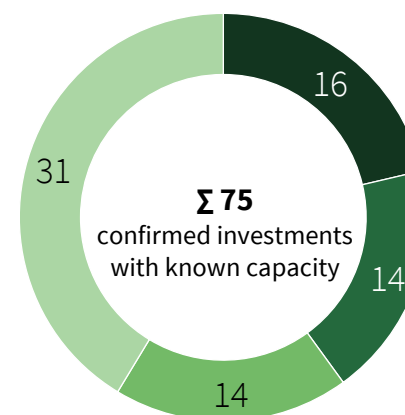
Petrochemicals is the main segment with 3.8 Mt (59%) of confirmed investments in 2022-25YTD, which only partially offsets the -17.8 Mt of closures in that segment

Confirmed¹⁾ chemical capacity investments in Europe by segment, 2022-25YTD [Mt]



■ Petrochemicals ■ Basic inorganics ■ Polymers ■ Specialty chemicals

Number of confirmed investments [#]



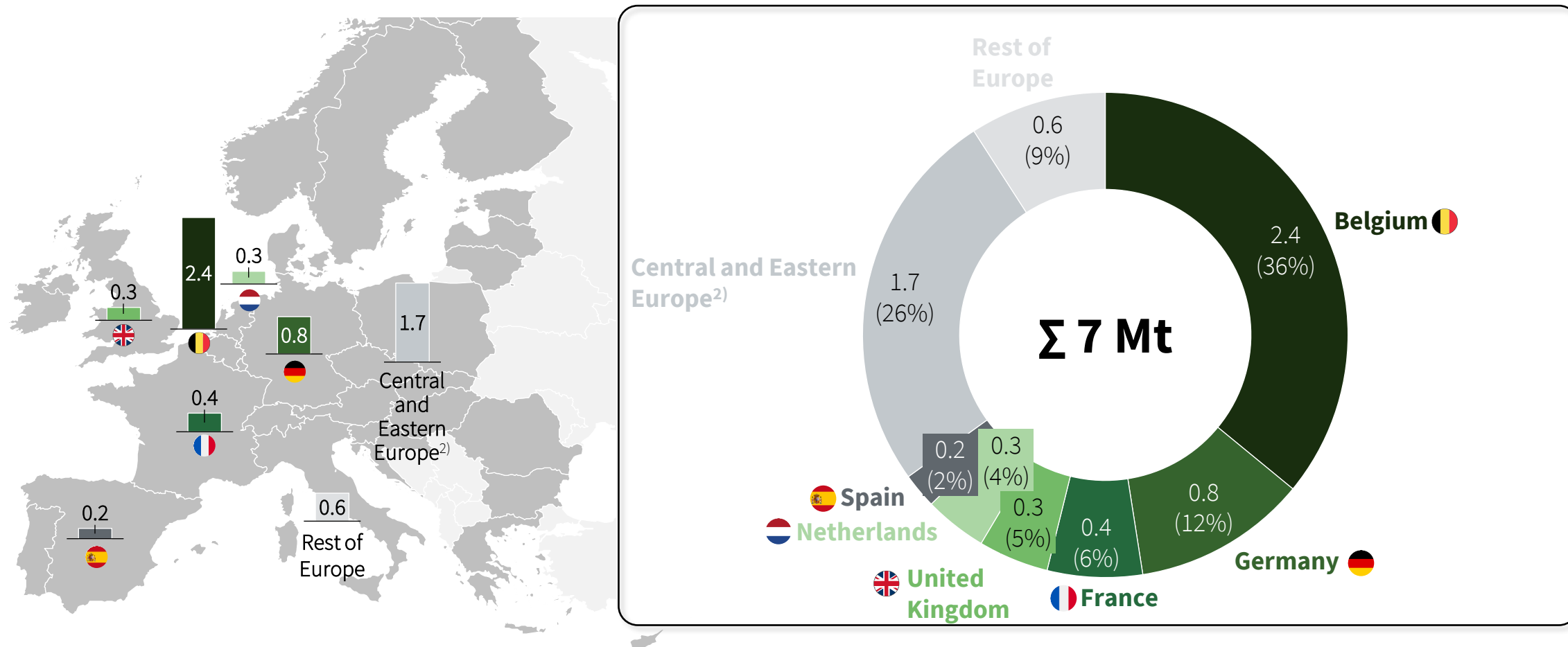
Insights

- Specialty chemicals has a relatively high number of announced projects (31), partially explained by investment themes such as the battery value chain
- While petrochemicals is the main segment, the 3.8 Mt of confirmed capacity investments are lower than the -17.8 Mt announced for closure
 - Five projects account for 3.3 Mt (87%) of the confirmed capacity
- Capacity investments in basic inorganics are smaller, driven by emission reduction and modernization investments that add relatively limited capacity

1) Confirmed investments include investments that are formally approved (FID), construction start announced, or operating; 2) Rounded to the nearest decimal

The main confirmed capacity investments are in Belgium (2.4 Mt), Germany (0.8 Mt) and France (0.4 Mt), accounting for 54% of the total

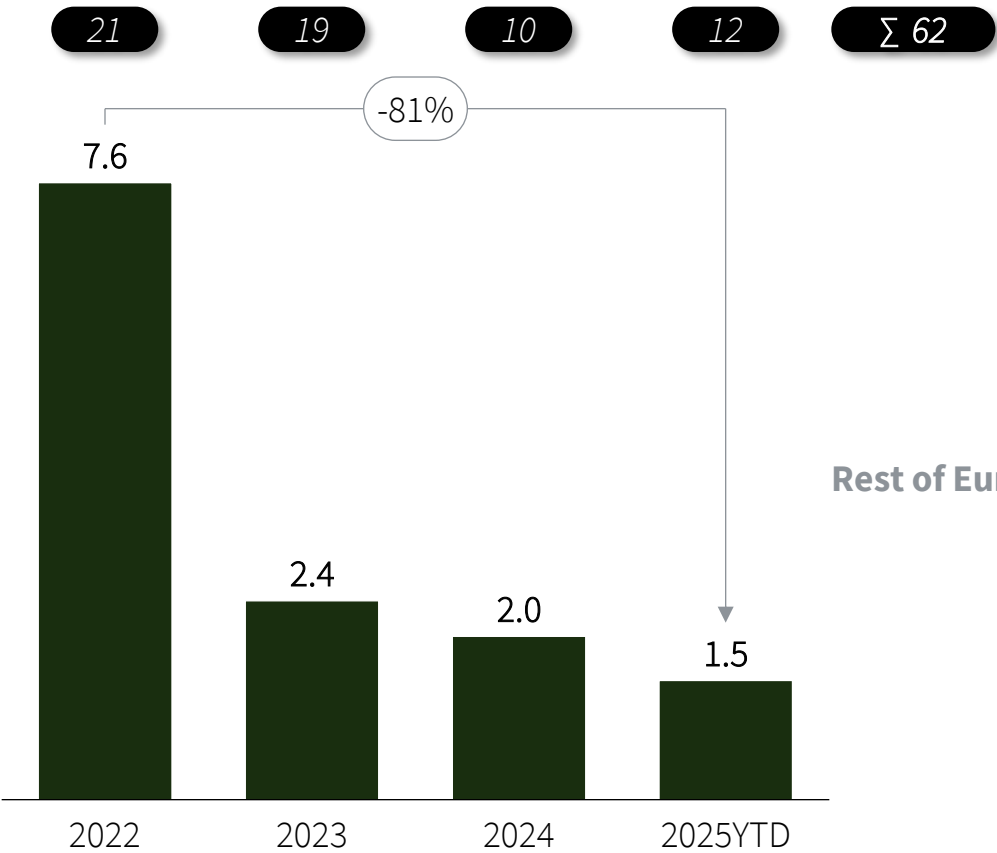
Confirmed chemical capacity investments in Europe by country, 2022-25YTD [Mt]



1) Confirmed investments include investments that are formally approved (FID), construction start announced, or operating; 2) Includes announcements in Bulgaria, Czech Republic, Estonia, Hungary, Poland, Romania, Slovakia

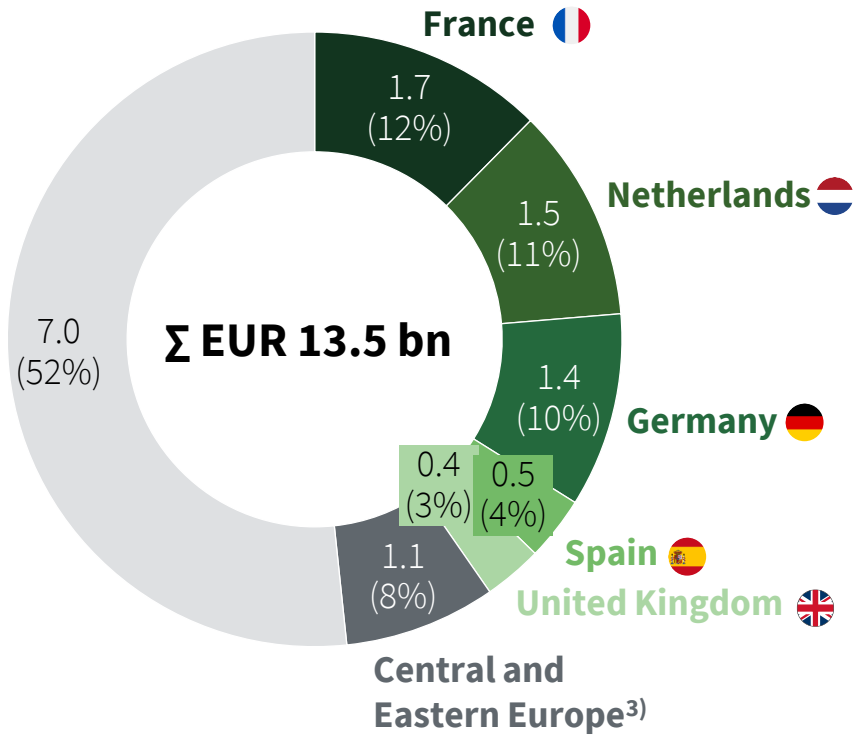
The total confirmed investment CAPEX has decreased by 81%, from EUR 7.6 bn in 2022 to EUR 1.5 bn in 2025YTD

Confirmed investment CAPEX¹⁾, 2022-25YTD [EUR bn]



xx Number of confirmed investments with CAPEX known

1) Project CAPEX as cited in confirmed project announcements, excludes maintenance and preservation CAPEX; 2) Includes confirmed announcements in Austria, Belgium, Finland, Italy, Norway, Portugal, Switzerland; 3) Includes confirmed announcements in Czech Republic, Estonia, Poland, Romania, Slovakia and Hungary; 4) Sales figures from Cefic Chemical Trends Report

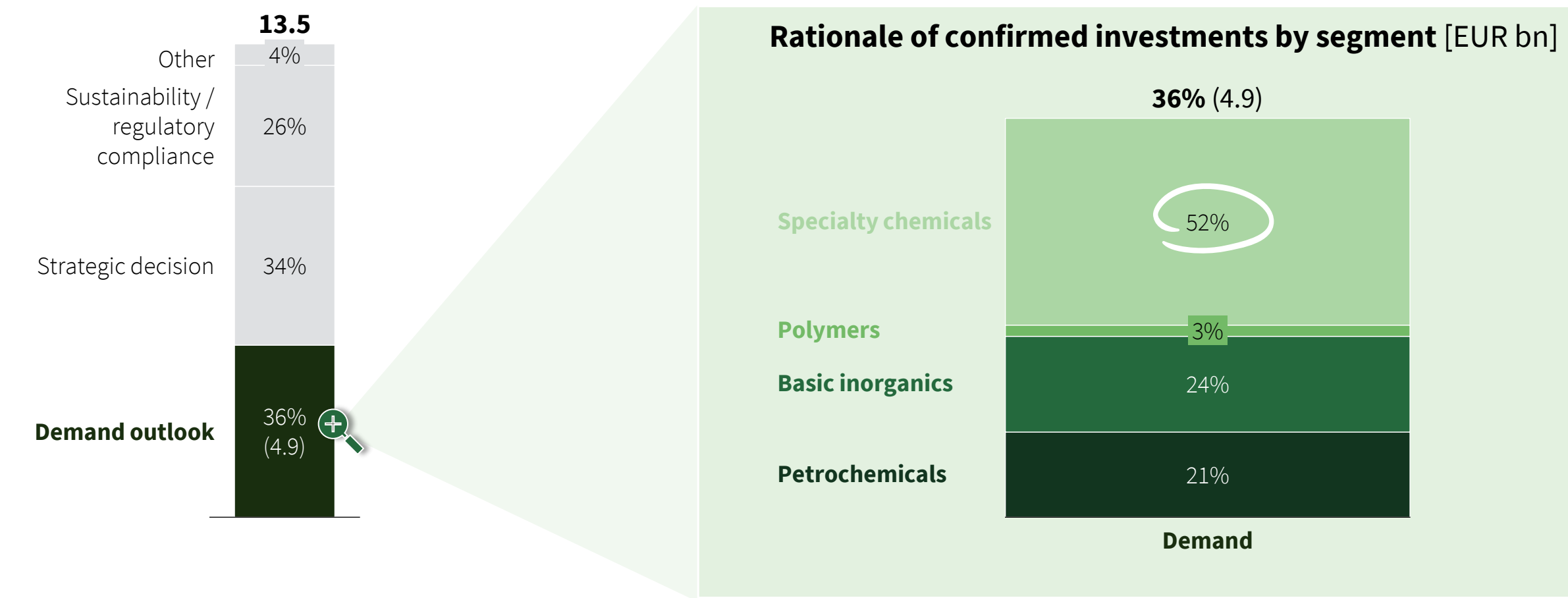


Insights

- Despite having the Europe’s largest chemical industry with 33% of chemical sales, Germany ranks below the Netherlands (9% of chemical sales) and France (14% of chemical sales)⁴⁾ in total confirmed investment CAPEX

Demand outlook is the main investment driver (36% of confirmed CAPEX), primarily within the specialty chemicals segment

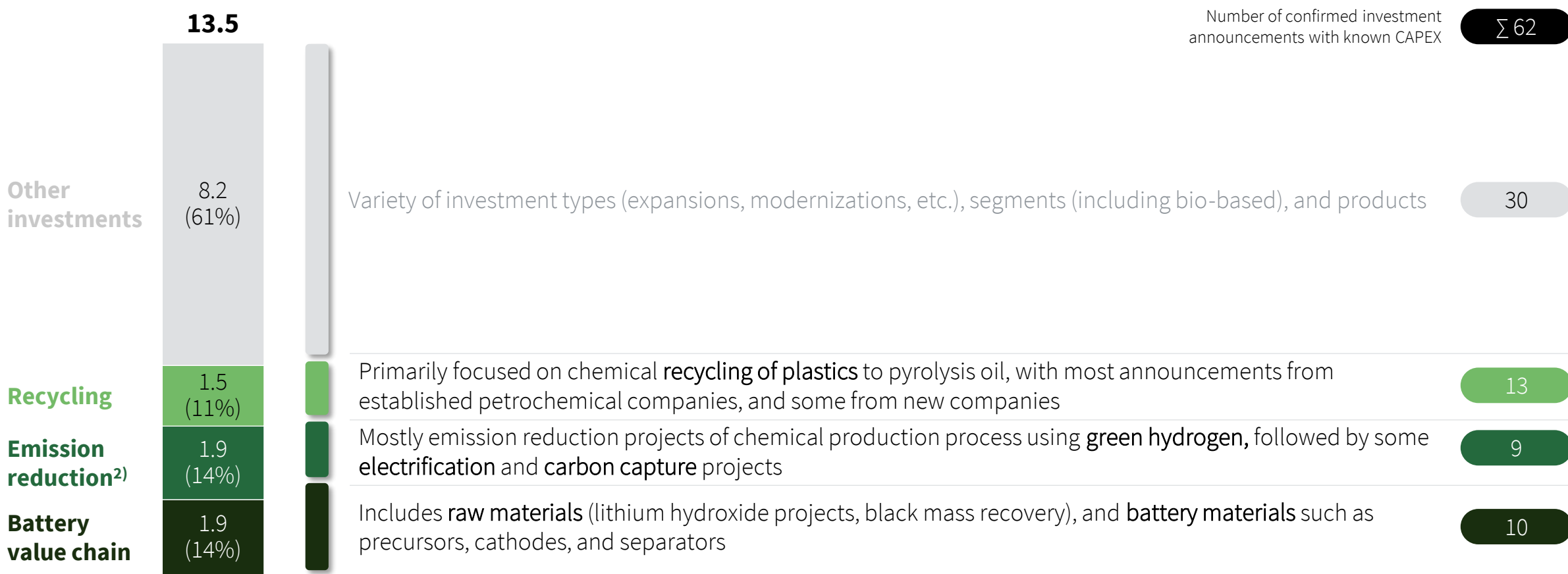
Rationale of confirmed investments in Europe by segment¹⁾, 2022-25YTD [EUR bn]



1) Based on the rationale for investment as mentioned in public announcements – In case multiple reasons were given, the primary reason was selected

Confirmed announced investments in the battery value chain (14%), emission reduction (14%), and recycling (11%) make up ~40% of total announced CAPEX

Confirmed¹⁾ investment CAPEX by investment theme, 2022-25YTD [EUR bn]



1) Confirmed investments include investments formally approved (FID), construction start announced, or operating; 2) Only emission reduction of chemical production plants were in scope, excluded from the scope were standalone green hydrogen or carbon capture projects

Key takeaways – Investments

Overall

- In contrast to the trend of accelerating closures, confirmed investment announcements have slowed (-90%), falling from 2.7 Mt in 2022 to 0.3 Mt in 2025YTD, totaling 7 Mt over 2022–25YTD and representing ~2% of European production capacity
- In addition to the 7 Mt of confirmed investments, there is 5 Mt of investment announcements that have not been confirmed (yet) by an FID, making the total announced (confirmed and unconfirmed) capacity 12 Mt

Segment and country view

- Although petrochemicals is the main segment with 3.8 Mt of confirmed investments announced (59%) in 2022-25YTD, it only partially offsets the -17.8 Mt of announced closures
- Main capacity additions are announced in Belgium (2.4 Mt), Germany (0.8 Mt), and France (0.4 Mt), accounting for 54% of total confirmed announced new capacity
- Confirmed CAPEX has dropped by -81%, from EUR 7.6 bn in 2022 to EUR 1.5 bn in 2025YTD
 - Germany (EUR 1.4 bn) stands below France (EUR 1.7 bn) and the Netherlands (EUR 1.5 bn) in total CAPEX despite having EU's largest chemical industry (Germany accounts for 33% of chemical sales in EU compared to France 14% and the Netherlands 9%¹⁾)

Investment rationale and themes

- Demand outlook is the main investment driver, mentioned for EUR 4.9 bn (36%) of announced CAPEX
 - Primarily within the specialty chemicals segment which is partially driven by announced projects in the battery value chain
- The other notable investment drivers are strategic decision (34%) and sustainability / regulatory compliance (26% of the CAPEX)
- Confirmed announced investments in battery value chain (14%), emission reduction (14%), and recycling (11%) make up ~40% of total announced CAPEX

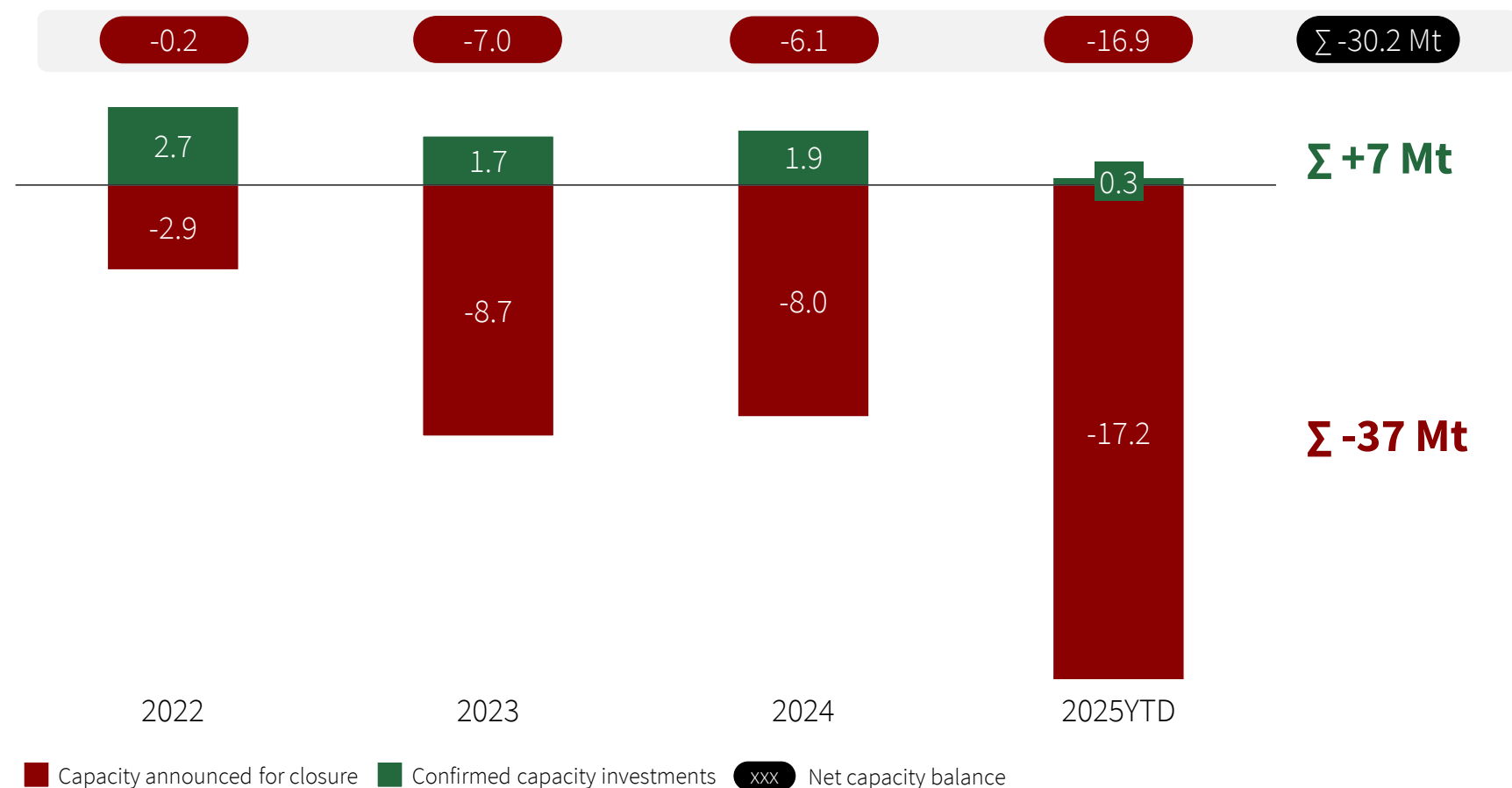
1) Sales figures from Cefic Chemical Trends Report



C.
**Net effect on the European
chemical industry**

The European chemical industry faces a structural capacity contraction, as net announced capacity balance points to a loss of -30.2 Mt

Net capacity balance of announced closures and confirmed investments in Europe, 2022-25YTD [Mt p.a.]

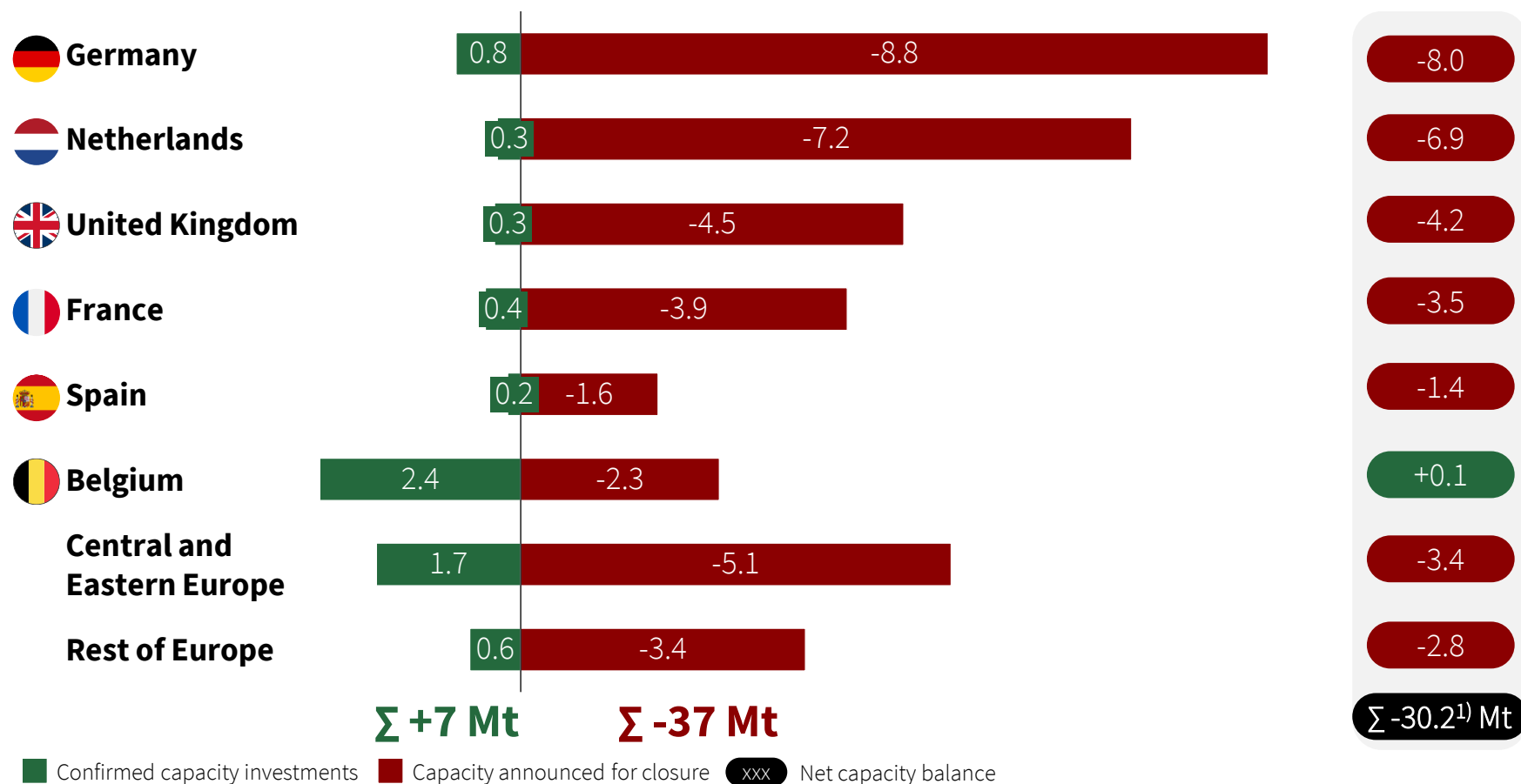


Insights

- The asymmetry between investment and closures is increasing between 2022-25YTD
- Closure announcements are typically nearer-term (1–2 years), whereas investments are typically longer term (2–5 years)

Net balance is negative in most countries, led by Germany (-8.0 Mt) and the Netherlands (-6.9 Mt), while Belgium has a positive balance (+0.1 Mt)

Net capacity balance of announced closures and confirmed investments by country, 2022-25YTD [Mt p.a.]



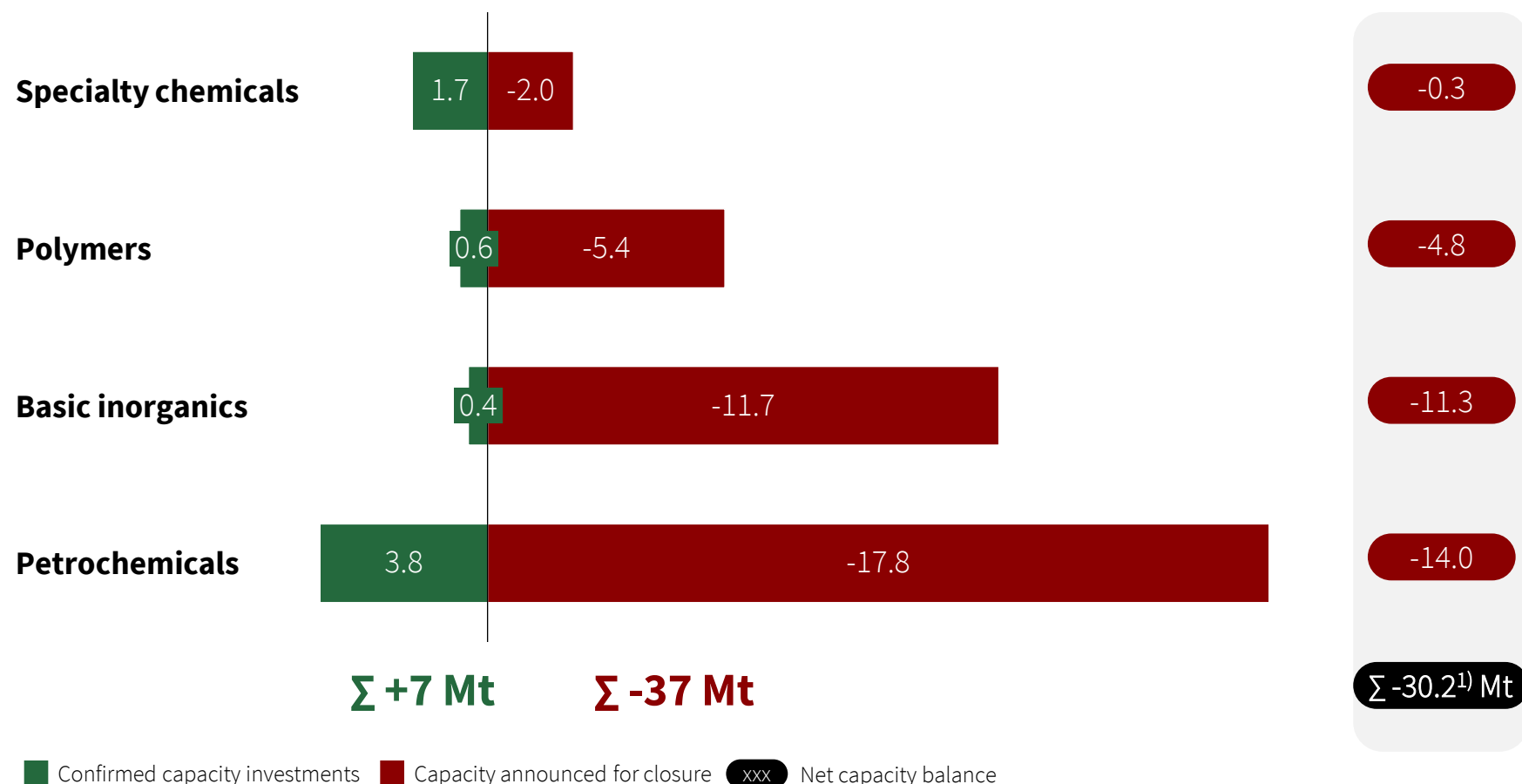
Insights

- The asymmetry between investments and closures holds across the major chemical industry countries, with Belgium being the exception with a select number of large investments
- Also in Central and Eastern Europe and the rest of Europe there is a negative net balance

1) Small discrepancies with sum of parts due to rounding

Announced closures have a negative net impact on all upstream segments and on the polymer segment, the specialty chemical segment is more stable

Net capacity balance of announced closures and confirmed investments by segment, 2022-25YTD [Mt p.a.]



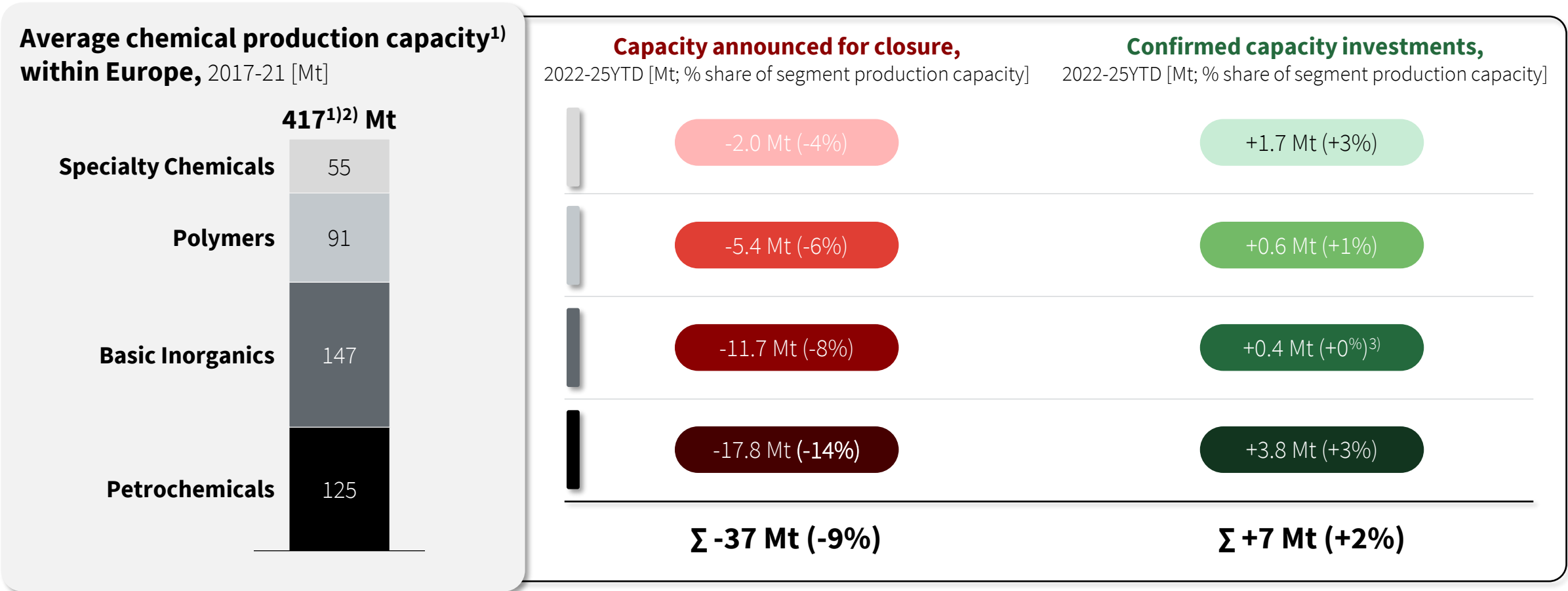
Insights

- Closures in the upstream petrochemicals and basic inorganics segments could have a knock-on effect on downstream segments
- The relatively neutral balance in the specialty chemicals segment is supported by projects in the battery value chain
- Capacities announced for closure in the specialty chemicals segment are not necessarily replaced by investments as these may concern different sub-segments

1) Small discrepancies with sum of parts due to rounding

Announced closures represent 9% of European chemical production capacity, with petrochemicals' capacity relatively more impacted at -14% of production capacity

Chemical production capacity and announced impact within Europe, 2017-25YTD [Mt; % of production capacity]



1) Based on Eurostat statistics on sold production and utilized manufacturing capacity of NACE code 20 (manufacture of chemicals and chemical products) averaged over 2017-2021, excluding Industrial gases, consumer chemicals, biofuels and biodiesels as these were not tracked in the closure and investment database; 2) Discrepancy with the sum of the parts due to rounding; 3) Rounded to nearest whole number

D. Scope and methodology



Scope

	Event types
	Geography
	Industry
	Timeline
	Type of information
	Employment impact

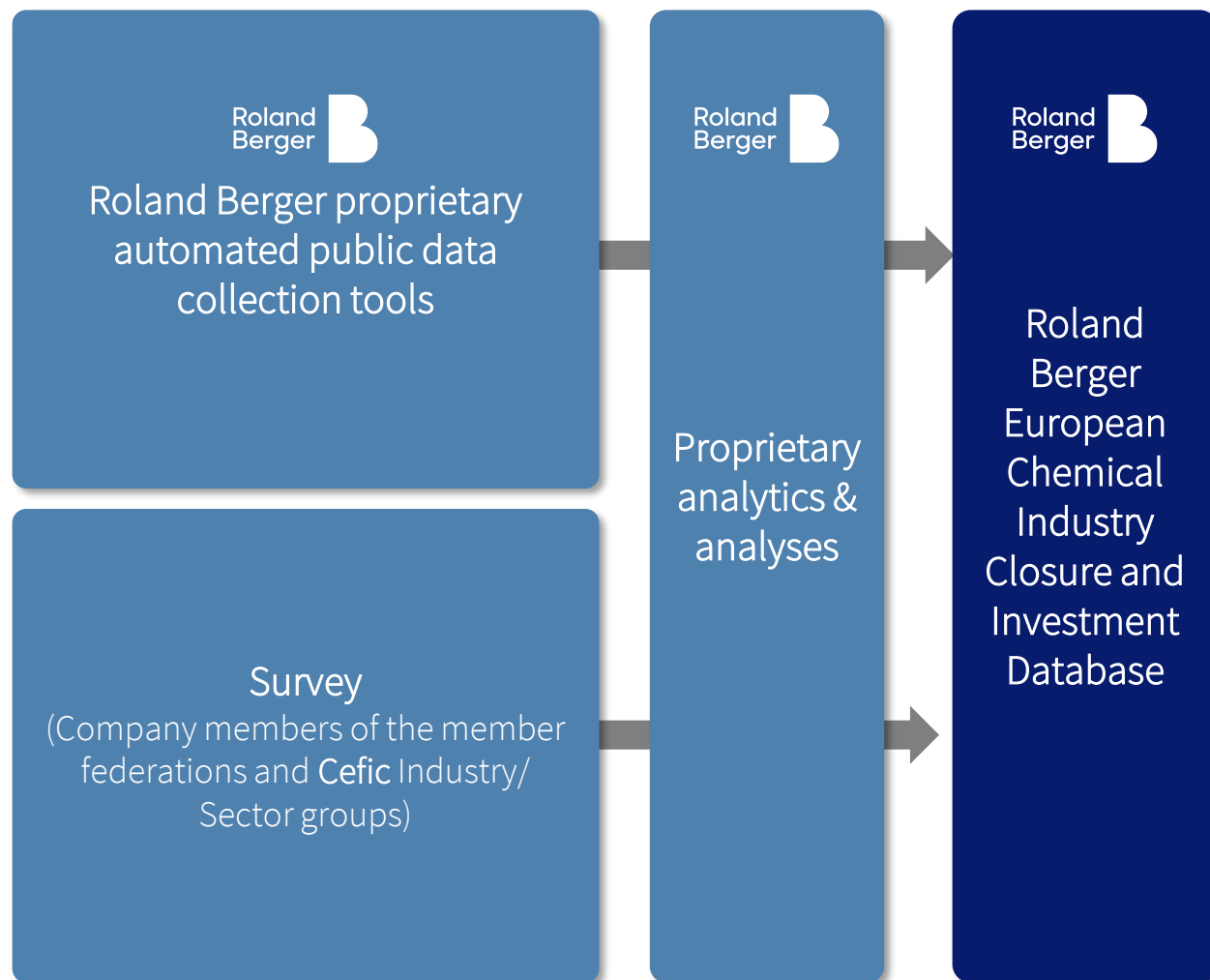
In scope

- **Announcements of production capacity closures** (including permanent closures, downsizings, and idlings of more than 3 months)
- **Announcements of production capacity investments** (including greenfield and brownfield investments of more than EUR 25 m CAPEX)
- **Only confirmed investments are shown in figures** unless stated otherwise
- Confirmed investments include investments that are formally approved (FID), have started construction, or have been operating
- **Europe** (EU27, UK, Norway, Switzerland)
- **Chemical industry** (NACE 20)
- Announcements made between 1st of January 2022 and 8th of December 2025 (referred to as 2025YTD)
- Only publicly available information
- Direct jobs affected/created by the closure/investment, as cited in the public domain

Not in scope

- Changes in utilization rates and idling due to (temporary) incidents
- (Internal) reorganizations, efficiency programs
- M&A activity or assets put up for sale
- R&D investments and pilot plants
- Maintenance or preservation investments
- Investments below EUR 25 m CAPEX
- M&A activity
- Industrial gases, and (bio)fuels
- Company confidential information
- Indirect jobs

Methodology



- The database that is underlying the figures in this report was developed by an exhaustive method:
 - Deployment of proprietary **automated public data collection tools** covering company press releases, chemical newspapers, local newspapers, and an additional detailed screening of **1,000+ companies**
 - Collection of company input through a **survey** circulated by **member federations** in Europe and the **Cefic Industry/ Sector groups** to their company members, **together representing 10,000+ companies**
 - Application of Roland Berger's proprietary analytics & analyses to **ensure accuracy and robustness** of the data
- All reported data are based on **public information**, as shown in company press releases, trade press articles, local newspapers, etc.
- **Announcements and capacity claims by companies were not challenged** – Announced investments and closures may not materialize

About Roland Berger

Roland Berger is a global management consultancy for transformation, innovation across all industries, and performance improvement.

Founded in 1967 in our home city of Munich, we are one of the leading representatives of our industry, with more than 50 offices and 3,500 dedicated colleagues around the world.

What unites us all is the goal of making a positive contribution for our clients and their entire value chain, and harmonizing business and society with a sustainable outlook



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Disclaimer

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Report commissioned by

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cefic.org



The background image shows an industrial facility, likely a refinery or chemical plant. In the foreground, there are large, horizontal, red-painted storage tanks. To the right, there is a complex network of vertical and horizontal pipes, some of which are insulated. In the background, there are more industrial structures, including what looks like a distillation column and various platforms with yellow safety railings. The overall scene is industrial and technical.

Roland
Berger

