Background

The chemicals sector is crucial to the global economy’s transition to net zero. The sector is the third-largest source of industrial greenhouse gas (GHG) emissions globally, and nearly 95% of all manufactured products use chemicals as inputs. To align with the goals of the Paris Agreement, chemical companies will need to transition production toward emissions neutral chemicals.

As long-term investors, we aim to support value creation. We have the fiduciary duty to consider relevant financial risks and opportunities, including climate change. There is increasing alignment across regional policies, global regulations, and consumer sentiments supporting the broad decarbonisation of our global economy. We believe that embracing the transition to net zero will position chemicals companies for improved growth prospects, reputational benefits, and financial value in the long run.

To avoid the worst impacts of climate change on our global economy and to stay competitive in a changing market, it is critical that the chemicals industry takes action to transition using technically and economically viable strategies.

Expectations

As a group of 20 investors, including Nordea Asset Management, Phoenix Group and Robeco, we support the following expectations for chemicals companies’ transition to net zero.

The expectations for chemical companies have been developed by a number of IIGCC members and are designed to build on and complement the sector–neutral Climate Action 100+ Net Zero Company Benchmark. These expectations are not directly affiliated with Climate Action 100+. The expectations are relevant to European and North American chemical companies, including those beyond the Climate Action 100+ focus list of companies.

Now developed, we will use the expectations to help further inform our engagement strategy and priorities for relevant companies in the chemicals sector. We encourage companies to respond positively to the expectations, including taking appropriate actions and to engage with investors constructively.

However, we recognise that in light of strategic, regulatory, jurisdictional or other relevant considerations, some companies may not be in a position to comply with all expectations and recommended disclosures as outlined. It is at the discretion of each individual company to adopt these guidelines as appropriate, in line with their own independent capabilities, strategies, policies and practices.

DISCLAIMER: All written materials, communications, surveys and initiatives undertaken by IIGCC are designed solely to support investors in understanding risks and opportunities associated with climate change and take action to address them. The IIGCC and its members are committed to complying with all laws and regulations that apply to them, including antitrust and other regulatory laws and regulations and the restrictions on information exchange and other collaborative engagement that said laws and regulations impose. On this basis, while the information listed in this document would assist investors with their assessments, the IIGCC recognises that companies cannot disclose information that is not publicly available and is considered to be competitively sensitive information by such company.
## Investor expectations for chemicals companies’ transition to net zero

<table>
<thead>
<tr>
<th>Expectations for chemicals companies transition to net zero</th>
<th>Recommended additional disclosures and information</th>
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<tbody>
<tr>
<td><strong>Governance and transparency</strong></td>
<td>Companies establish climate-related governance mechanisms, fulfilling Climate Action 100+ (CA100+) Net Zero Company Benchmark (Benchmark) indicators 8, and 10.</td>
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<tr>
<td><strong>Net zero commitment</strong></td>
<td>Companies make public commitments to long term ambitions for net zero chemicals production by 2050 or earlier, fulfilling CA100+ Benchmark indicator 1.</td>
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<tr>
<td><strong>Decarbonisation targets</strong></td>
<td>Companies establish and deliver on short, and medium, and long-term decarbonisation targets, fulfilling CA100+ Benchmark indicators 2, 3, 4, and 11 in addition to the criteria below:</td>
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<tr>
<td><strong>Scope 3 emissions</strong></td>
<td>• Company targets address all relevant upstream and downstream emissions, including feedstock procurement and end-of-life emissions</td>
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<td><strong>3rd party validation</strong></td>
<td>• Companies seek target validation under the Science Based Targets Initiative Chemicals methodology (expected Q4 2023)</td>
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<tr>
<td><strong>Transition plans advancing net zero production</strong></td>
<td>Companies develop robust transition plans outlining policies, assumptions, partnerships, and actions supporting the advancement of net zero chemicals production, fulfilling all the CA100+ Benchmark indicator 5 in addition to the criteria below:</td>
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<tr>
<td><strong>Decarbonisation of chemical production processes</strong></td>
<td>• Set a time-bound target to electrify energy consumption, and for that electricity to come from renewable or low-carbon sources</td>
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<td></td>
<td>• Disclose the percentage of energy consumption that is electrified or low emission</td>
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<tr>
<td><strong>Use of carbon-neutral feedstocks</strong></td>
<td>• Set a timebound target to switch to emission-neutral feedstocks</td>
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<td>• Disclose emissions neutral feedstocks used as proportion of overall feedstock use</td>
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<td>• Disclose lifecycle assessments, including emissions associated with upstream, production, in-use, and end-of-life, of feedstock utilisation</td>
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<td>• Disclose carbon sources segmented by fossil fuel-based, non-organic waste, biomass, direct air capture, and others</td>
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<tr>
<td><strong>Capturing opportunities from low emission products</strong></td>
<td>• Disclose how the definitions of ‘green revenues’ (CA100+ Benchmark indicator 5.2) relate to emissions neutral or low emission products</td>
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<td></td>
<td>• Disclose associated carbon intensities for ‘green revenues’ products based on full lifecycle assessments</td>
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<td>• Disclose revenue from emissions neutral chemicals and alignment with the EU taxonomy</td>
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<td></td>
<td>• Disclose carbon negative chemicals production capacity</td>
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<tr>
<td><strong>Circularity</strong></td>
<td>• Set a time-bound target for circular feedstock use, where appropriate, as a proportion of overall feedstock use</td>
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<td></td>
<td>• Disclose revenues from circular products and services</td>
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<td>• Disclose practices enabling the circular economy by producing reusable products, developing recycling technologies, and supporting closed loop ecosystems through collaboration</td>
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<td>• Disclose hazardous chemicals assessments for products, and the strategy for eliminating or substituting hazardous substances within products</td>
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</table>
Expectations for chemicals companies transition to net zero

Companies develop capital allocation plans supporting net zero ambitions, fulfilling CA100+ Benchmark indicator 6 in addition to the criteria below:

| Investments and expenditures | Asset retirement and new assets
|-------------------------------|-------------------------------|
|                               | • Commitment to end investment in new unabated fossil-based assets
|                               | • Disclose asset retirement timelines
|                               | • Disclose investment timelines for low emissions production assets
| Existing assets maintenance   | • Disclose retrofit timelines
|                               | • Disclose the percentage of retrofits that are hydrogen ready (planned and existing)
| Carbon pricing mechanisms     | • Disclose internal carbon price and how it is used in decision making, covering all business segments and geographies

Public policy advocacy

Companies support public policies consistent with the transition to net zero and are fulfilling CA100+ Benchmark indicator 7.

Just transition

Companies publicly commit to providing a just transition, fulfilling CA100+ Benchmark indicator 9.

### Highlighting existing best practice

We acknowledge the unique challenges facing the chemicals sector and the progress made by companies to advance emissions neutral chemicals production. The chemical sector rightfully counts toward the ‘hard-to-abate’ sectors. The above expectations draw on science-based and universal climate transition standards for the chemical industry.

We therefore also want to highlight existing best practices among the major European and US-based chemical companies and recognised leaders in the sector.

<table>
<thead>
<tr>
<th>Category</th>
<th>Best Practice</th>
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<tbody>
<tr>
<td>Decarbonisation targets</td>
<td>• <strong>LyondellBasell</strong> was the first major chemical producer to include Scope 3 in its net zero commitment and set a 30% reduction target by 2030</td>
</tr>
</tbody>
</table>
| Decarbonisation of chemical production processes | • **Bayer** was the first chemical producer to set a 100% renewables target for all its electricity needs by 2030
  Partially fulfilling the expectations:
  • **LyondellBasell** with a 75% renewables target by 2030
  • **BASF** with a 100% renewables target based on 2021 procurement by 2030 |
| Use of carbon-neutral feedstocks      | • **LyondellBasell** has started on parts of the investor expectation on feedstocks, with a commitment to the introduction of feedstocks made from renewable sources and plastic waste |
| Circularity                           | • **Dow** has committed to close the loop by enabling 100% of Dow products sold into packaging applications to be reusable or recyclable by 2035
  • **BASF**’s monomer division has committed to develop a circular option in every major product line by 2025 |
Supporting investor organisations

Aegon Asset Management UK
Aegon Investment Management B.V.
BNP Paribas Asset Management
Downing LLP
DPAM
Elo Mutual Pension Insurance Company
InsightInvestment
KBI Global Investors
La Française Group
Legal and General Investment Management (LGiM)
MN
Nordea Asset Management
Öhman Fonder
PGGM
Phoenix Group
Robeco
Storebrand Asset Management
Swedbank Robur
Trusteam

“As long-term investors, we believe all companies will need to transition to net zero in the next two decades, with meaningful emission reductions by 2030. For hard-to-abate industries, which includes Chemicals, achieving deep emission reduction will be difficult and requires early commitment from companies, investment in new technologies, and supportive investors. PGGM strongly expresses support for the Investor Expectations of Chemical Companies’ Transition to Net Zero, as it gives investors clear guidance on what levers exist to help companies transition.”

Gillian Gailliaert – Junior Advisor Responsible Investment at PGGM

“The new investor expectations clearly and methodically set out a framework upon which future climate-related engagement with companies in the critical sector of chemicals can be better informed. As the CA100+ lead for the L’Air Liquide engagement, we recognise the chemicals sector has an outsized role to play in supporting and driving the global transition to net zero, which means we were delighted to be part of the development of the new sector-specific investor expectations as they will allow us to undertake more granular, more targeted and more constructive engagement with companies in the sector.”

Elin Noring – Senior ESG Analyst at Nordea Asset Management

“Robeco’s engagement on improving climate change performance of several chemical companies was very successful to date. It is important that we now have global investor expectations established for the chemical industry. These expectations provide a solid basis for holding the companies accountable and achieving further impact with our engagement activities.”

Peter van der Werf – Head of Engagement at Robeco

“The transition of the chemicals sector is crucial for the global economy’s journey toward achieving net zero emissions. We are proud to endorse the statement published by the IIGCC working group. These expectations provide us with the opportunity to structure the dialogue with companies we are engaging in and to structure the assessment of their transition strategies. We eagerly look forward to using this as a complement to the Climate Action 100+ initiative, encouraging companies to establish ambitious targets and trajectories on this critical issue, thereby helping us fulfill our commitments to our customers.”

Claire Berthier – CEO at Trusteam

IIGCC Investor expectations of chemical companies’ transition to net zero
Endnotes

1 International Energy Agency ETP 2020 reports ~1.4 gigatons of carbon dioxide (Gt CO2)/year.

2 Science Based Targets Initiative

3 https://www.climateaction100.org/net-zero-company-benchmark/methodology/


5 https://sciencebasedtargets.org/sectors/chemicals:
   Methodology is planned for release by the end of 2023

6 Where ‘low emission’, the definition of what the company considers low emission should be disclosed

7 Where ‘others’, the definition of such feedstocks should be disclosed and broken down per feedstock by the company


