**Fiche d'entretien**

<table>
<thead>
<tr>
<th>WHO</th>
<th>Site visit BASF Ludwigshafen</th>
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<tbody>
<tr>
<td>WHEN</td>
<td>June 28, 08:15 – 12:00</td>
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<td>WHERE</td>
<td>BASF Ludwigshafen</td>
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<tr>
<td>WHY</td>
<td>Objective of the visit is to better understand the challenges of the chemicals industry in its twin transition, especially after the Russian military aggression in Ukraine. BASF is the largest chemical producer in the world and operates in a variety of markets. Its business is organized in the segments of Chemicals, Plastics, Performance Products, Functional Solutions, Agricultural Solutions, and Oil and Gas. BASF produces a wide range of chemicals such as solvents, amines, resins, glues, electronic-grade chemicals, industrial gases, basic petrochemicals, and inorganic chemicals. The most important customers for this segment are the pharmaceutical, construction, textile, and automotive industries. The Ludwigshafen site is the largest integrated chemical complex in the world. A good third of BASF’s global workforce works here (see below). Ludwigshafen is also home to most of BASF’s operating divisions and numerous corporate units. As the headquarters of BASF, it is also the cradle of the Verbund concept, where production facilities, energy flows, and logistics are networked together. The driving principle of the Verbund concept is to add value through the efficient use of resources. At the BASF Verbund sites, production plants, energy and material flows, logistics, and site infrastructure are all integrated. BASF currently operates six Verbund sites worldwide: two in Europe, two in North America, and two in Asia. It is building a seventh Verbund site in Zhanjiang, in the Chinese province of Guangdong. BASF Ludwigshafen is the region’s largest employer. It employs more than 39,000 people there. Some other figures:</td>
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<tr>
<th>Transport and production</th>
<th>Site area</th>
<th>Total number of buildings</th>
<th>Production capacity</th>
<th>Production facilities</th>
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<tr>
<td></td>
<td>~10 km²</td>
<td>~2,000</td>
<td>~200</td>
<td>~125</td>
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- **Road:** ~2,850 km, ~106 km, ~230 km, ~200 mm, ~1,900 mm, ~30 mm
- **Rail:** ~15 mm, ~400 mm, ~400 mm, ~32 mm
- **Barge:** ~15 mm, ~400 mm, ~400 mm, ~32 mm
- **Proportion of total transport volume:** 40%, 32%, 28%
BASF has three power plants at the site. In contrast to conventional power plants, which are only used to generate electricity, they also produce steam as well as electricity. The plants operate according to the principle of combined heat and power generation. BASF is one of the largest industrial electricity consumers in Europe. It bundled its activities in renewable energies under the umbrella of BASF Renewable Energy GmbH as of January 1, 2022. The wholly owned subsidiary’s business activities focuses on supplying the BASF Group in Europe with electricity from renewable energies and electricity trading activities in Europe.

MESSAGE

Transition Pathways [Chemicals sub-pathway]

- Regarding specifically Energy intensive Industries, due to Russia’s invasion of Ukraine and the subsequent supply disruptions and spiking energy prices, the work on transition pathways for this ecosystem has evolved consistently. Stakeholders are very busy facing the challenges of this new global situation and we are trying to support them. This means that also our work has to constantly adapt.

- In the context of this ecosystem, we have realized the necessity of creating a Chemicals sub-pathway (to be published as a chapter of the Ell transition pathways) because this specific sector has particular needs to be addressed to realize a proper green and digital transition. The stakeholders are contributing intensively to the work on this Chemicals sub-pathway, which is expected to be completed in Q3 of this year.

- After the publication of RePowerEU, we are also starting the work on the Renewables ecosystem. The publication of the SWD for Renewables is expected in September and this will open the public consultation.
Defensives:

- What difficulties do you foresee in the co-creation and implementation of the Transition Pathway for Chemicals?
  - The document must encompass an overview of the necessary actions the industry and EU/MS must undertake together to move forward with the twin transition. It requires to lay down all commission initiatives and industry commitments towards the pre-defined objectives (climate and energy targets, Chemical Strategy for Sustainability objectives, resilience and digitalization).
  - The difficulties lays in being able to provide a broad picture on the next steps whilst being detailed enough to follow a clear roadmap in the years ahead.
  - The Transition Pathway includes proposals of innovative energy and feedstock (i.e. Carbon Capture and Utilisation, substitutions which should respect the Safe and Sustainable by Design criteria as laid in the CSS).
  - Specificities of downstream sectors cannot be addressed in this document but could be further developed in the co-implementation phase.
  - The co-implementation will serve to determine how to measure the efforts made by industry (definition of KPIs) and agree on a more detailed timeline per quarter.
  - The active involvement of Member States will be necessary in order to ensure feasibility of the implementation of the actions laid out.
What is the Commission doing on strategic dependencies?

- An in-depth review (deep dive) has been published in February 2022 and identified 6 critical chemicals on which the EU is highly dependent on external stakeholders. This exercise was part of the Update of the Industrial
Strategic study:

- COM launched a study at the beginning of the year on strategic foresight for chemicals. Two workshops have already taken place, working with stakeholders to identify future innovations and weaknesses in specific supply value chains. This study will build on the information on dependencies and will provide a foresight looking based on scenarios of the future of the chemical industry. It will be available as of 2023.

What is the Commission doing to actively support industry’s need for flexibility in administrative procedures?

- The Chemicals Strategy outlined several support measures for industry through EU funding and investment mechanisms. Financial instruments include the European structural and investment funds, InvestEU, the Strategic Investment Facility, React-EU, and Horizon Europe among others.

- We are considering how to simplify and streamline hazard and risk assessment via the “One substance one assessment” process (for instance centralizing bodies in charge of hazard assessment etc.)

Restrictions roadmap under REACH?

- The restrictions roadmap is a tool for a transparent discussion on priorities for restrictions until the REACH revision will be in place.
- The Commission has published the roadmap on 25 April 2022.
**High Level Round Table for the Chemicals Strategy**

- High-level Round Table (third meeting): took place on **18 May 2022** with focus on safe and sustainable chemicals (BASF CEO participated in its capacity as CEFIC President);

- An update of the Transition Pathway was introduced at the meeting and further discussion is expected during the meeting in November 2022.
Name of the Director who has cleared the briefing: Kristin Schreiber
BASS request ID: GROW/8904 - Name of main contact person - Telephone number - Directorate/Unit: GROW/2

CVs of other participants

[Redacted]

[Redacted]

[Redacted]

[Redacted]
Name of the Director who has cleared the briefing: Kristin Schreiber

BASIS request ID: GROW/GDF - Name of main contact person: Hans Ingels - Telephone number: 6641 - Directorate/Unit: GROW/1 F

PROGRAMME

Guests
Ms. Kerstin Jorna, Director-General DG GROW, European Commission
Ms. Kristin Schreiber, Director DG GROW.F, European Commission

Participants BASF
BASF SE

08:15 Arrival of guests – D105
Kerstin Jorna arrives at D105 with
Kristin Schreiber arrives at D105 with
[Name] will greet the guests in the foyer and will guide the
guests to room 3 where they will meet other BASF participants.

08:20 Welcome: Introduction to site Ludwigshafen and its transformation

08:30 – 09:15 The energy transformation of the Ludwigshafen site
[Name] 15 min presentation followed by discussion

09:15 – 10:15 Implications of the Chemical Strategy for Sustainability for BASF
[Name] 15 min presentation incl. examples followed by discussion

10:20 Picture

10:30 Site tour with stops at steam cracker plant tour including groundbreaking site for e-furnace. Additional stop at analytics lab

11:55 End of site tour
D105

12:00 Departure of guests
K. Jorna to leave with
[Name] will bring K. Schreiber to Frankfurt airport.