

# A 9-POINT ACTION PLAN FOR THE EUROPEAN CHEMICAL INDUSTRY'S INNOVATION LEADERSHIP



Innovation in the European Chemical Industry is the key success factor for Europe's industry to be competitive, reach the targets of the "Green Deal", and increase Europe's open strategic autonomy. This 9-point action plan outlines what needs to be done to position the Chemical Industry in Europe as a Leader in Innovation in line with the request for a "Smart Innovation Framework" and the overall objectives set in the "Antwerp Declaration" published in February 2024.

## Action 1

### Reduce administrative burden.



**Why?** To speed up the development and market entry of innovative solutions in Europe:

- Innovations face significant regulatory, technological, and economic challenges.
- "Breakthrough Technologies" encounter even higher barriers and require special support, such as "innovation sandboxes".
- Europe's permitting processes are slower than other regions and need to be expedited.
- Ensuring planning reliability allows new technologies to operate long enough to generate a reasonable return on investment, fueling future R&D.

#### Result:

- ✓ Faster progression from idea to market, increasing the chemical industry's competitiveness and ensuring the timely achievement of Green Deal targets.

## Action 2

### Prioritise pilot plant infrastructure, including co-location facilities, in the future Horizon Europe programme.



**Why? To maximise synergies and scale up breakthrough technologies:** In the pilot plant stage, development costs increase substantially compared to lab costs. For a breakthrough technology facing high uncertainty regarding market entry, shared pilot plant facilities offer a significant cost and speed advantage. Small companies, especially, could use multipurpose facilities without making their own direct investment.

#### Result:

- ✓ Pilot facilities, such as campus-based ones, with flexible infrastructure to also support smaller companies across industries.
- ✓ A network of EU technology parks with flexible, multipurpose infrastructure supporting the validation of new sustainable process technologies.

## Action 3

### Foster EU-wide collaboration across industries and academia, supporting cross value chain initiatives and sufficient joint centres of excellence for Intellectual Property (IP) development and sharing.



**Why?** Expanding collaboration among all stakeholders will accelerate the development of new and existing value chains in Europe.

#### Result:

- ✓ Moving from a linear development model to an ecosystemic approach will foster knowledge creation and sharing across the entire value chain.

## Action 4

### Streamline funding applications with a focus on mature technologies and initial market entry.



**Why?** For simpler, faster and more predictable access to funding. Streamlined funding can address confusion and fragmentation across European and regional funding schemes, particularly in the "valley of death" in innovation where co-investment options are most uncertain.

#### Result:

- ✓ Public-private co-investment will position Europe as a leading hub for investment in chemical innovation.

## Action 5

**Make sustainability and industry competitiveness strategic drivers for innovation and development of new technologies & products.**



**Why?** Not all the technologies and products needed to meet net-zero and circular economy goals are available or have yet been invented. We need a fact-based, scientifically open approach and support for developers and scientists to find the best solutions to meet these objectives.

**Result:**

- ✔ Sustainability and competitiveness criteria will be a basis in all transformative European technology programmes.
- ✔ Implement a practicable "Safe and Sustainable-by-Design" (SSbD) framework for chemicals and products.

## Action 6

**Implement effective and efficient market pull measures.**



**Why?** The chemical industry must invest significantly to transition towards more sustainable practices, aligned with EU Green Deal while remaining globally competitive. These investments are viable only if appropriate market-pull mechanisms are in place to stimulate demand in innovative net-zero, low carbon and circular products.

**Result:**

- ✔ Smart market-pull measures will drive R&D investment and manufacturing in Europe's chemical industry, improving economic, environmental, and societal well-being.

## Action 7

**Establish clear standards on data sharing and calculation protocols.**



**Why?**

- Better data sharing improves sustainability assessments and ensures consistency in calculating Scope 1, 2, and 3 carbon emissions, as well as Life Cycle Assessments (LCAs).
- Globally standardised data enables material circularity through digital product passports and data exchange.
- Clear calculation methods for mass balance, the Carbon Border Adjustment Mechanism (CBAM), and circular content create a level playing field and provide reliable information across value chains.

**Result:**

- ✔ Consumer confidence through more reliable data on European-manufactured products, leading to growth and value creation.

## Action 8

**Strengthen Europe's innovation ecosystem to retain and attract talent through a collaborative approach among industries, startups, research entities, educational institutions, and funding bodies.**



**Why?** Europe's academic and vocational systems must evolve to compete globally for digital talent. Addressing current skill gaps and improving gender balance in STEM fields is crucial, as untapped potential persists due to rigid educational requirements and social hurdles.

**Result:**

- ✔ Flexible personal funding schemes that recognise experience beyond formal education will expand the talent pool for innovation.

## Action 9

**Promote innovation in the chemical industry as beneficial for society through public events and online platforms.**



**Why?** Although there are policies in place to ensure chemicals are safe and sustainable, there is a widely shared perception that chemicals are associated with potential risks.

**Result:**

- ✔ Positive public perception will accelerate innovation and create more openness towards experimental and collaborative approaches, which will attract top talent and ideas.