Findings of the Economic analysis of the impacts of the Chemicals Strategy for Sustainability (CSS)

cefic

MAVESZ Chemical Industry Conference 19 October 2022



## Context:



## Chemicals Strategy for Sustainability (CSS)

## **Chemistry & the European Green Deal**





## The EU Commission's vision for chemical policy



Supported by the European Parliament and the Council (EU Member States)



Chemicals are produced/used in a way that maximises their benefits to society while avoiding harm to prove & people



Production and use of **safe and sustainable chemicals** becomes a benchmark worldwide



14 October 2020

The Chemicals Strategy is "an opporturity to reconcile the societal value of chemicals with human health and planetary boundaries as well as to support the EU industry in producing safe and sustainable chemicals. It is also an opportunity to respond to the legitimate aspirations of EU citizens for a high level of protection from hazardous chemicals and to promote the EU industry as a global frontrunner in the production and use of safe and sustainable chemicals." \*\*

## What does this mean in practice?



- The Chemicals Strategy is a major, highly-ambitious initiative which will:
  - Prioritise prevention and substitution
  - Re-define EU chemicals policy
  - Generic restrictions for faster action
- Contains **around 80 actions**, most of them legislative changes, to be implemented between 2021 2024
- Involves 'targeted revision' of REACH and CLP, the pillars of EU chemicals legislation



Minimise and control

Eliminate and remediate



## CLP vs other legislation, according to the European Commission

## CLP and other chemicals legislation

#### Information on properties of chemicals

- Horizontal: <u>REACH</u> (Registration + Evaluation)
- · Sectorial: Pesticides, Biocides



#### Identification of hazards

- Horizontal: CLP
- [Sectorial: REACH, pesticides, biocides]

- Ecodesign for
  - Sustainable
  - Products Regulation
- Taxonomy
- Ecolabels

#### Managing risks

- Horizontal: REACH (Restrictions + Authorisations)
- Sectorial: Plant protection products, Biocides, Cosmetics, Toys, Water, Waste, Industrial emissions, Workers protection, Eco-design, Food contact materials. Industrial accidents





Strasbourg, 18.10.2022 COM(2022) 548 final

ANNEXES 1 to 5

#### ANNEXES

to the

## COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS

Commission work programme 2023

#### **Annex II: REFIT initiatives<sup>2</sup>**

Initiative directly or indirectly following up on a proposal of the Conference on the Future of Europe

	No.	Title	Simplification objective / potential (short explanation of the burden reduction and simplification objective)			
	A Eui	European Green Deal				
		REACH revision: targeted amendments of the Regulation EC/1907/2006 on the Registration, Evaluation and Authorisation of Chemicals	This targeted revision, announced in the chemical strategy for sustainability and the zero pollution action plan, has the aim of securing European competitive advantages and innovation by promoting sustainable chemicals, simplifying and streamlining the regulatory process, reducing burden and protecting human health and the environment.  (legislative, incl. impact assessment, Article 114 TIEU, Q4 2023)			



## Overview of the main policy changes towards faster, stricter and more preventive regulatory action



 Ensure the most harmful chemicals are not used in consumer and professional products

**New hazard classes:** on endocrine disruptors + persistent and mobile substances (CLP)

- Address chemical mixtures ('cocktail') i.e.
   Mixture Assessment Factor (REACH)
- Apply concept of essential uses in chemical legislation (REACH and more)

PFAS: phase out for non-essential uses (REACH and more)

- Global targets beyond 2020
- Chemicals banned in the EU not produced for export
- Common standards & innovative assessment tools internationally (GHS)
- Sound chemicals
   management in international
   cooperation

Innovating for safe and sustainable EU chemicals

 Safe and sustainable by design: criteria and support network

- **Funding to support industrial innovation :** climate neutral and clean production
- Identify key chemical value chains: to strengthen EU's strategic autonomy
- Non-toxic material cycles in products and waste decontamination solutions (ESPR)

Stronger EU
legal framework
to address
environment &
health concerns

Simplifying and consolidating the legal framework

- One substance, one assessment: improve transparency, reallocation of scientific work, coordination between agencies, data interoperability & re-use (new legislation)
- Reform Authorisation & Restriction processes (REACH)
- Strengthen compliance, enforcement, market surveillance

Set the example for a global sound management of chemicals

Comprehensive knowledge base on chemicals

- EU research & innovation (R&I) agenda for chemicals
- Innovative testing and risk assessment methods
- Improve knowledge on chemical properties (polymers, low volume, etc) REACH
- **R&I programmes:** (bio)monitoring
- Framework of **indicators** to assess policies





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Innovating for safe and sustainable EU chemicals

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- network
  Phase 2 Modules
  Funding to support industrial innovation: climate neutral and clean production
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## **Modules**

Phase 1	Phase 2	
February 2021 – December 2021	2022	
Addition of hazards to the CLP Regulation (EC) No. 1272/2009	Ban on exports	
Extension of the Generic Risk Approach (GRA)	Requirements for Polymer Registration	
	Essential Use (Qualitative)	
Mixture Assessment Factor (MAF) Qualitative	REACH restriction on PFAS	



# Phase 1: Scenarios and Results



### Objectives of the Economic Analysis of the Impacts of the CSS

- Provide input to the European Commission's own Impact Assessment on CLP and REACH
- The work has followed the European Commission's own <u>Better Regulation Guidelines</u> where possible
  - Experienced and independent economic research consultancy Ricardo Energy & Environment
- This report only assesses business impacts
- Representative of the sector : Contributions from over 100 companies representing
   67% of the EU-27 chemicals output



## **CLP and REACH Changes so far**

#### CLP

- New hazard classes (ED, PBT, vPvB, PMT, vPvM, Immnunotoxicants and Neurotoxicants) will be included as part of CLP.
- Direct impacts: increase in administrative or compliance activities, i.e. additional costs.
- Indirect impacts: product discontinuation or substitution trigger, driven by non-legislative pressures (Ecolabel, product image, retailers etc)

### +

- REACH: Generic Approach to Risk Management ('GRA')
  - The Generic Risk Approach will result in the banning of products with certain hazard classes in consumer and professional uses
  - The impact will occur as a result of implementation through REACH and sectoral legislation.

#### CHEMICAL POLLUTION IN NATURAL ENVIRONMENT

#### The Commission will:

- propose new hazard classes and criteria in the CLP Regulation to fully address environmental toxicity, persistency, mobility and bioaccumulation;
- introduce endocrine disruptors, persistent, mobile and toxic and very persistent
   and very mobile substances as categories of substances of very high concern;
- ensure that the information made available to authorities on substances allows comprehensive environmental risk assessments by strengthening requirements across legislation;
- address the impact on the environment of the production and use of pharmaceuticals in the upcoming pharmaceuticals strategy for Europe<sup>58</sup>;
- support research and development for decontamination solutions in terrestrial and aquatic environments;
- reinforce the regulation of chemical contaminants in food to ensure a high level of human health protection.

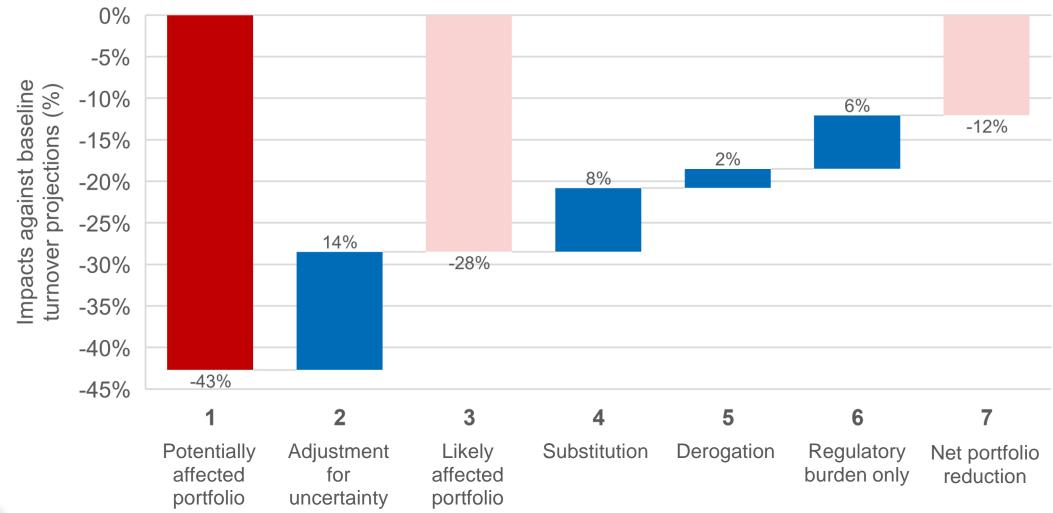
#### PROTECTION AGAINST MOST HARMFUL CHEMICALS

#### The Commission will:

- extend the generic approach to risk management to ensure that consumer products –
  including, among other things, food contact materials, toys, childcare articles,
  cosmetics, detergents, furniture and textiles do not contain chemicals that cause
  cancers, gene mutations, affect the reproductive or the endocrine system, or are
  persistent and bioaccumulative. In addition, immediately launch a comprehensive
  impact assessment to define the modalities and timing for extending the same generic
  approach, with regard to consumer products, to further harmful chemicals, including
  those affecting the immune, neurological or respiratory systems and chemicals
  toxic to a specific organ:
- in the meantime, while the generic approach to risk management is not in place, prioritise all the above-listed substances for restrictions for all uses and through grouping, instead of regulating them one by one;
- ensure the safety of children<sup>43</sup> from hazardous chemicals in childcare articles and
  other products for children (other than toys) to provide the same level of protection as
  in toys, through the mandatory legal requirements of the General Product Safety
  Directive and restrictions in REACH;
- define criteria for essential uses<sup>44</sup> to ensure that the most harmful chemicals are only
  allowed if their use is necessary for health, safety or is critical for the functioning of
  society and if there are no alternatives that are acceptable from the standpoint of
  environment and health. These criteria will guide the application of essential uses in
  all relevant EU legislation for both generic and specific risk assessments;
- extend to professional users under REACH the level of protection granted to consumers;



## Turnover - Size of the potentially affected product portfolio



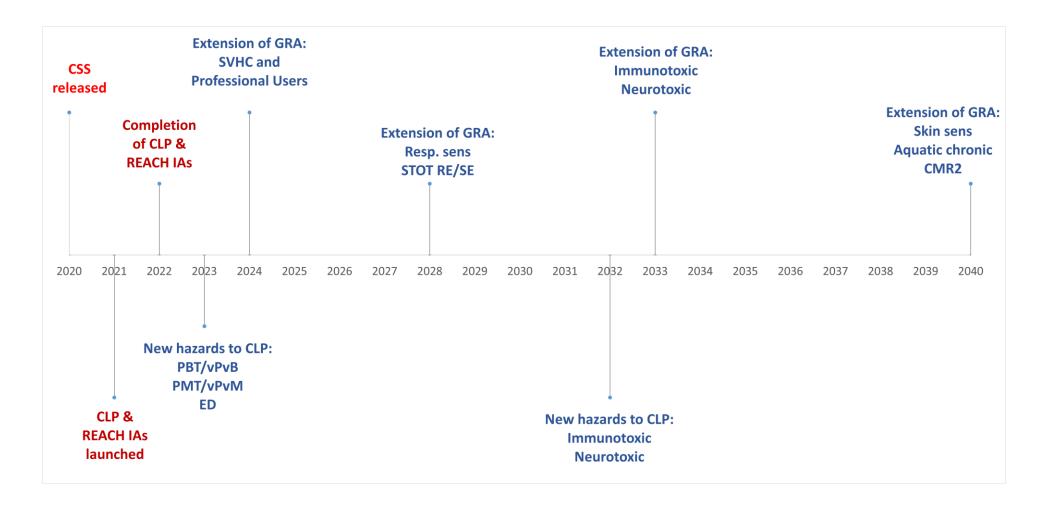


## Estimated impacts on the turnover of the EU Chemical Sector

- The size of the potentially affected product portfolio was estimated to be around
   43% of sectoral turnover or over 12,000 substances
- After applying different weighting factors to account for uncertainty about definitions and criteria in the CSS, Ricardo estimated that the size of products in scope of being affected by the policy changes by 2040 would be lower and around 28% of the estimated sectoral turnover.
- Changes to CLP and GRA, when accounting for potential business responses, could lead to a reduction in product portfolio and business (in turnover terms) of around 12%



## Considered timeline applied







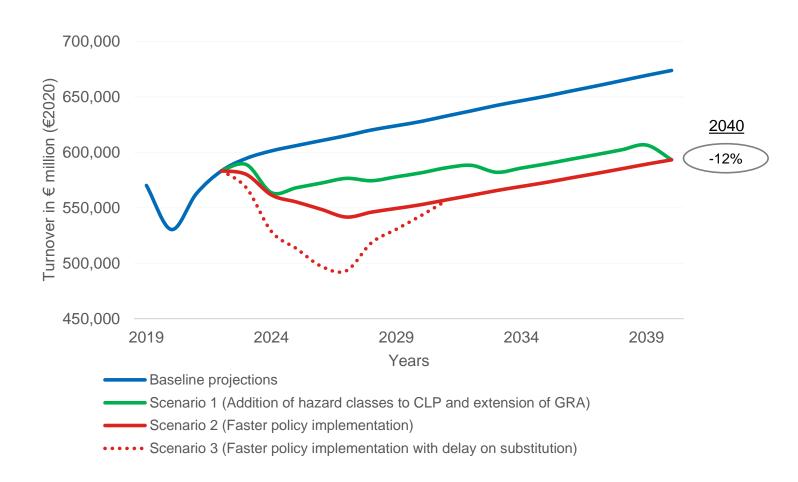
Business as usual –i.e., CSS is not applied, CLP remains the same and GRA is not extended

and extension of the GRA over a gradual nere substitution / derogation is possible). Scenario 1 considers the addition of hazard classes to CLP and implementation timetable (market withdrawal except where

Scenario 2 assumes a 5-year implementation timetable of the GRA and CLP changes to the GRA and CLP (as per CSS Action Plan) and assumes businesses can respond immediately.

Scenario 3 considers policy changes are implemented quickly such as in Scenario 2, but reflects time needed for businesses to respond

#### Mitigation measures applied by companies(substitution/reformulation) is included in the scenarios



Source: Ricardo analysis based on Eurostat data and a bespoke survey to chemical companies. Note: The Y-axis has been truncated for ease of observation of differences between impact scenarios.

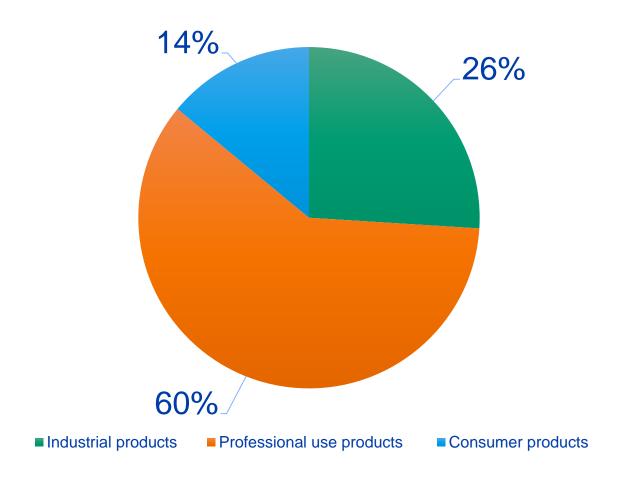


Annualised impacts on selected business and economic indicator of the EU chemicals sector, against the baseline scenario (%)

Themes (business or economic indicators)	Scenario 1 (Addition of hazard classes to CLP and extension of the GRA)	Scenario 2 (Faster, 5-year implementation timetable)	Scenario 3 (Faster implementation timetable with delay on substitution/reformulation)
Turnover (first order effects)	A loss of €47 billion per year on average against the baseline	A loss of €67 billion per year on average against the baseline	A loss of €81 billion per year on average against the baseline
Total GVA contribution (direct, indirect, induced)	A loss of €40 billion per year on average against the baseline	A loss of €57 billion per year on average against the baseline	A loss of €68 billion per year on average against the baseline
Regulatory burden	An additional annualised burden of €434 million each year over the period	An additional annualised burden of €518 million each year over the period	An additional annualised burden of €518 million each year with a delay
Total employment contribution (direct, induced)	77,000 fewer jobs, on average, when compared to the baseline in any given year	106,000 fewer jobs, on average, when compared to the baseline in any given year	126,000 fewer jobs, on average, when compared to the baseline in any given year



## Potentially affected products by user group





### **Effect on DU industries**

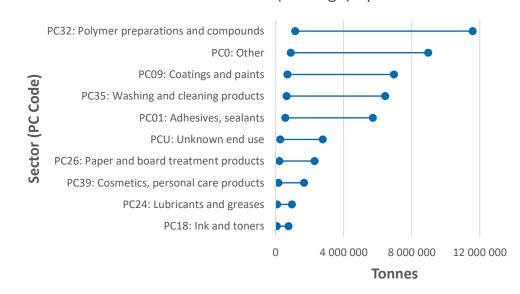
**Professional and consumer products represent 74% of all products potentially impacted** (the rest are industrial use products): 60% professional uses and 14% consumer uses.

The results suggest that the downstream user sectors that could be most significantly impacted are:

- Polymer preparations and compounds (used in various value chains – from pharmaceuticals to construction)
- Paints and coatings;
- Washing and cleaning products;
- Paper and board treatment products;
- Adhesives and sealants;
- Cosmetics and personal care products;
- Lubricants and greases;
- Biocidal products and plant protection products;

#### Ink and toners.

#### Affected Sales Volume (Tonnage) by Sub-sector





## Aggregated report – early findings on CSS impact

#### **Impacts**

Administrative costs, with some market withdrawal in sensitive sectors

Market Loss
(€47-80 bn turnover loss / year)
Uncertain derogations (essential use) /
substitution

Market loss (partly overlapping with GRA and CLP)

(€7-11 bn turnover loss / year)

Various impacts, substance-dependant: costs (more studies or more RMM), partial market withdrawals with some turnover loss

Mostly administrative burden
(€1-2 bn costs + resources over 7 years)
+ small market withdrawal
Limited laboratory capacity

