

# European Funding Mechanisms and the Need for New Skills



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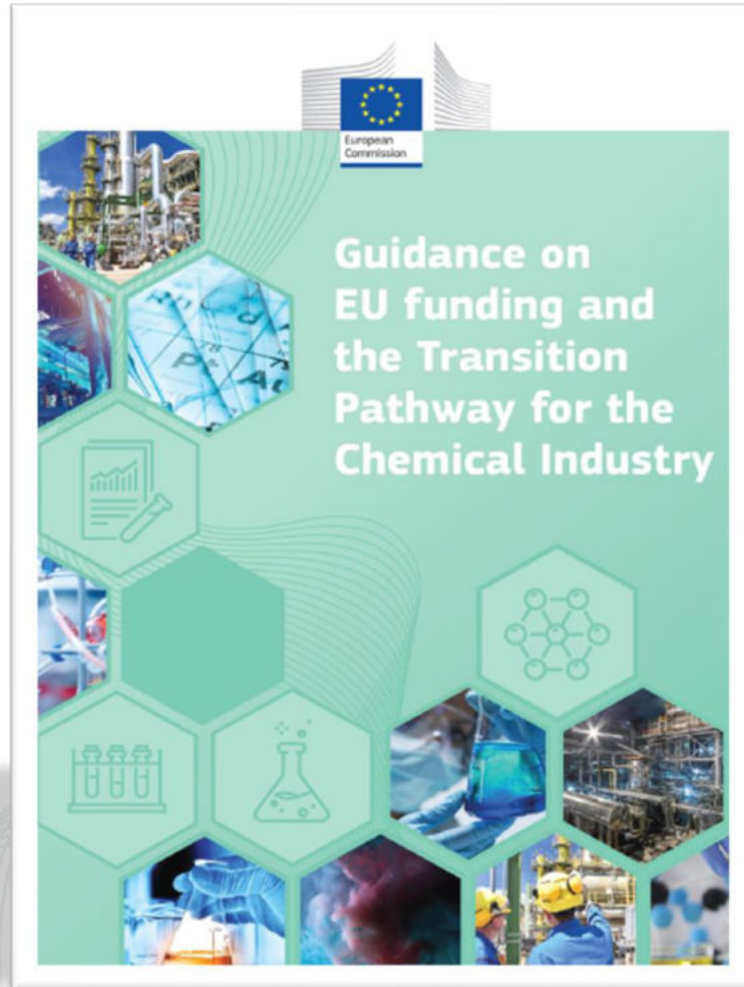
# Transition Pathway Overview

Based on EC's Transition Pathway for the Chemical Industry (2023):

- 8 building blocks
- ~190 actions



# Purpose of the EU funding guidance



The guide aims to:

- ✓ Describe funding programmes aligned with Transition Pathway actions
- ✓ Provide guidance to chemical companies—especially SMEs—on where to apply for funding

# Overview of EU Funding Landscape



# 2021-2027 MFF

2021–2027 MFF includes:

- Recovery and Resilience Facility (RRF)
- Horizon Europe
- InvestEU
- Just Transition Mechanism
- ERDF, ESF+, Cohesion Fund
- Digital Europe Programme
- Single Market Programme
- LIFE
- Erasmus+
- Innovation Fund (including STEP Seal instruments)



# How EU Funding Supports the Chemical Industry

Funding focuses on:

- Decarbonisation
- Circularity and waste valorisation
- Digital transformation
- Alternative feedstocks
- Energy infrastructure (hydrogen, electrification)
- Skills development





# Funding programmes most relevant to chemicals





# Recovery and Resilience Facility (RRF)

- Budget: EUR 723.8 billion
- Supports reforms + investments aligned with six pillars (green, digital, cohesion, etc.)
- Examples include:
  - Belgium: chemical substitution (PFAS, EDs)
  - Germany: hydrogen projects (IPCEI)
  - Portugal: hydrogen & renewable gases



# Horizon Europe: Overview

- Budget: EUR 95.5 billion
- Three pillars:
  - Excellent Science
  - Global Challenges & Industrial Competitiveness
  - Innovative Europe (including EIC)



# Horizon Europe: Relevant Partnerships

- Examples:
  - PARC (chemical risk assessment)
  - Processes4Planet
  - CBE Joint Undertaking
  - Made in Europe





# CBE Joint Undertaking

- Budget: EUR 2 billion
- Supports:
  - Bio-based value chains
  - Circular materials
  - Substitution of fossil feedstock



# InvestEU

- Mobilises EUR 372 billion
- Includes four windows:
  - Sustainable infrastructure
  - Research, innovation & digitalisation
  - SMEs
  - Skills
- Examples relevant to chemicals:
  - CCS/CCU, decarbonisation, hydrogen infrastructure



# Just Transition Mechanism

- EUR 18 billion JTF + InvestEU + Public Sector Loan Facility
- Supports:
  - Clean energy
  - Circularity
  - Skills development
  - SMEs





# Cohesion Funds, ERDF, ESF+

- Support regional projects including:
  - Hydrogen valleys
  - Industrial symbiosis
  - Cross-border investment



# Digital Europe Programme

- Budget: EUR 7.6 billion
- Areas:
  - AI
  - Cybersecurity
  - Advanced digital skills
  - EDIHs
- Relevant to chemical digitalisation
- Examples:
  - Polytronics, DIS4SME



# Single Market Programme (SMP)

- Supports SME competitiveness, circularity, recycling technologies
- Examples:
  - INGENIOUS
  - POLREC





# Erasmus+

- Very relevant for skills development
- ChemSkills project (2023–2027)
- Focuses on mapping and developing green/digital skills in:
  - Plastics, Consumer chemicals, Fertilisers, Rubber, Pharma, Petrochemicals



# LIFE Programme

- Supports:
    - Circular economy
    - Waste valorisation
    - Chemical substitution
- Examples: LIFE ChemBee, ZEBRA  
LIFE, FFR-2



# Innovation Fund

- Budget: EUR 40 billion
- Key focus for:
  - Low-carbon industry
  - CCS/CCU
  - Renewable hydrogen
  - Chemical recycling
- Examples: Project Air, PULSE, ECOPLANTA



# Strategic Technologies for Europe Platform (STEP)

Supports:

- Clean tech manufacturing
- Digital deep tech
- Biotechnologies





# Open and upcoming calls



# Open and Forthcoming Calls

- Horizon Europe (co-electrolysis, hydrogen valley, PFAS replacement)
- Innovation Fund (NZT pilot, medium-, large-scale)
- SMP (CirclnWater, INGENIOUS)
- Digital Europe (advanced digital skills)



# How to Navigate the Funding & Tenders Portal

- Search keywords (chemical, hydrogen, circular, digital, bio-based)
- Filters
- Participant eligibility
- Consortium building



# Skills Needs for the Chemical Industry





# Cross-cutting skills needed

- Green skills: circularity, SSbD, waste valorisation, bio-based chemistry
- Digital skills: process digitalisation, data spaces, automation, AI use in R&D
- Energy transition skills: hydrogen, electrification, CCU/CCS
- Regulatory/safety: REACH, SSbD framework
- Vocational & technical skills: maintenance, operations, quality control



# Skills by function

- **Technicians:** operation of hydrogen/electrolysis equipment, recycling processes
- **Process engineers:** digital twins, AI optimisation, new feedstock
- **R&D staff:** SSbD approaches, biomaterials, biotechnology
- **Managers:** sustainability reporting, circular business models
- **Safety professionals:** chemical risk assessment, new materials testing



# Mapping skills to funding programmes



# Mapping Skills Needs to Funding Opportunities

## Skills area → Funding instrument

- **Green skills, circularity, bio-based chemistry** → Horizon Europe (Clusters 4 & 6), LIFE, CBE JU
- **Digital skills (AI, data, automation)** → Digital Europe Programme, Horizon Europe (Cluster 4), SMP DIS4SME
- **Energy transition (hydrogen, CCUS)** → Innovation Fund, Horizon Europe (hydrogen calls), RRF, ERDF
- **SSbD / Regulatory risk assessment** → Horizon Europe (PARC, SSbD calls), LIFE (FFR-2)
- **VET + upskilling** → Erasmus+ (ChemSkills), ESF+, Just Transition Fund





# Which Programmes Are Most Relevant for SMEs?

Top opportunities:

- SMP Euroclusters (POLREC, INGENIOUS)
- Digital Europe (EDIHs, SME training)
- Horizon Europe EIC Accelerator
- LIFE (close-to-market environmental solutions)
- InvestEU (loan guarantees)



# Practical Tips for Applicants

- Align project with Transition Pathway topics
- Demonstrate scalability & replicability
- Highlight TRL level accurately
- Use regional/NCP support
- Align with SSbD where applicable

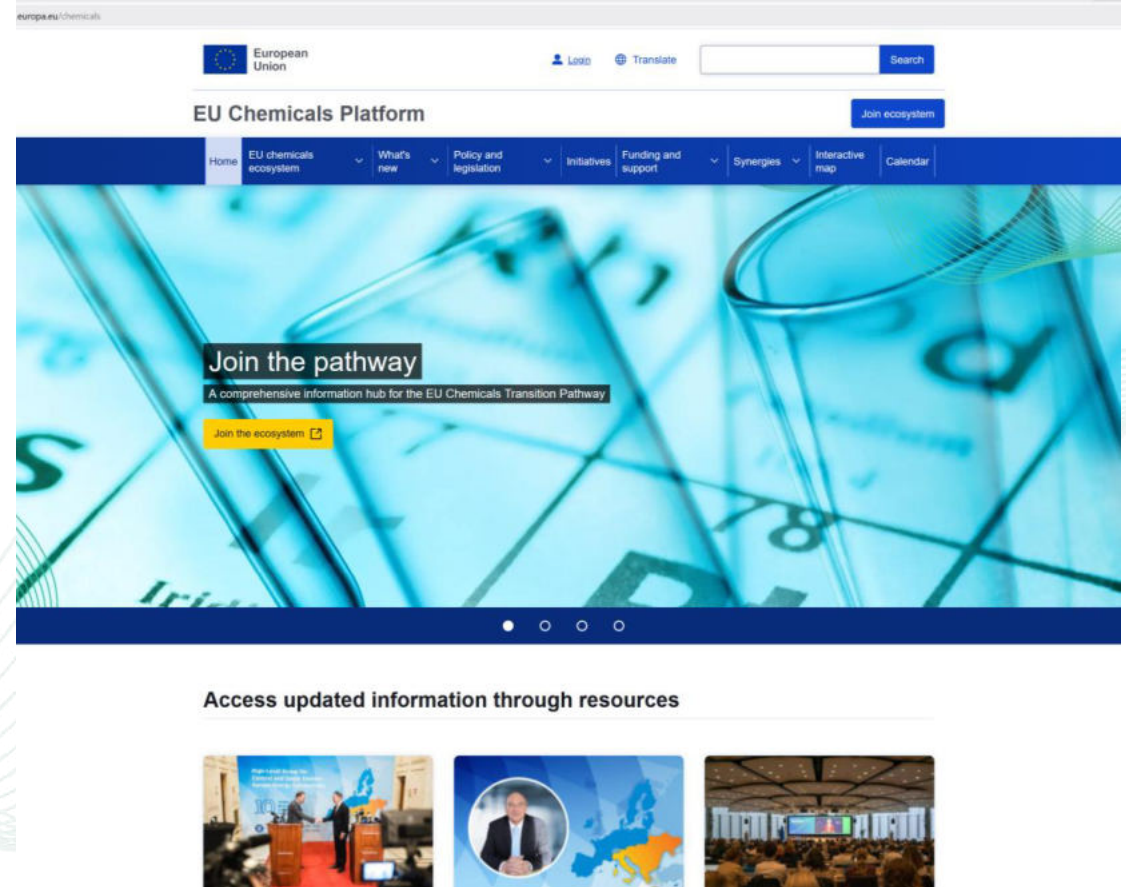


# Stakeholders Support Platform



# The platform

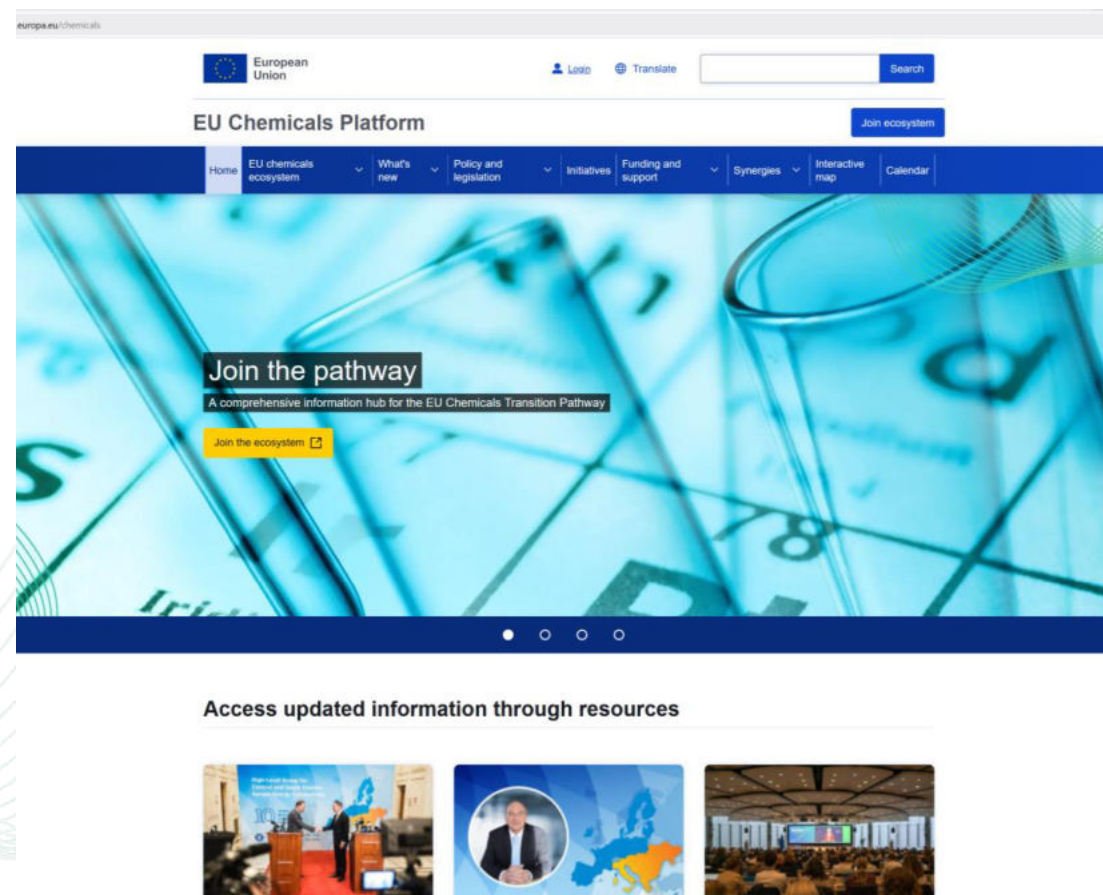
- The primary objective of the platform is to accelerate the twin transition (green + digital) within the EU chemicals ecosystem. It supports the Action Plan's ambition by:
  - Facilitating access to funding and support instruments;
  - Improving transparency about regulatory and policy developments;
  - Promoting collaboration among industry, research, regions and authorities;
  - Enabling initiatives to be shared and scaled across borders.
  - In other words, it bridges information, resources and actors to transform the industry.





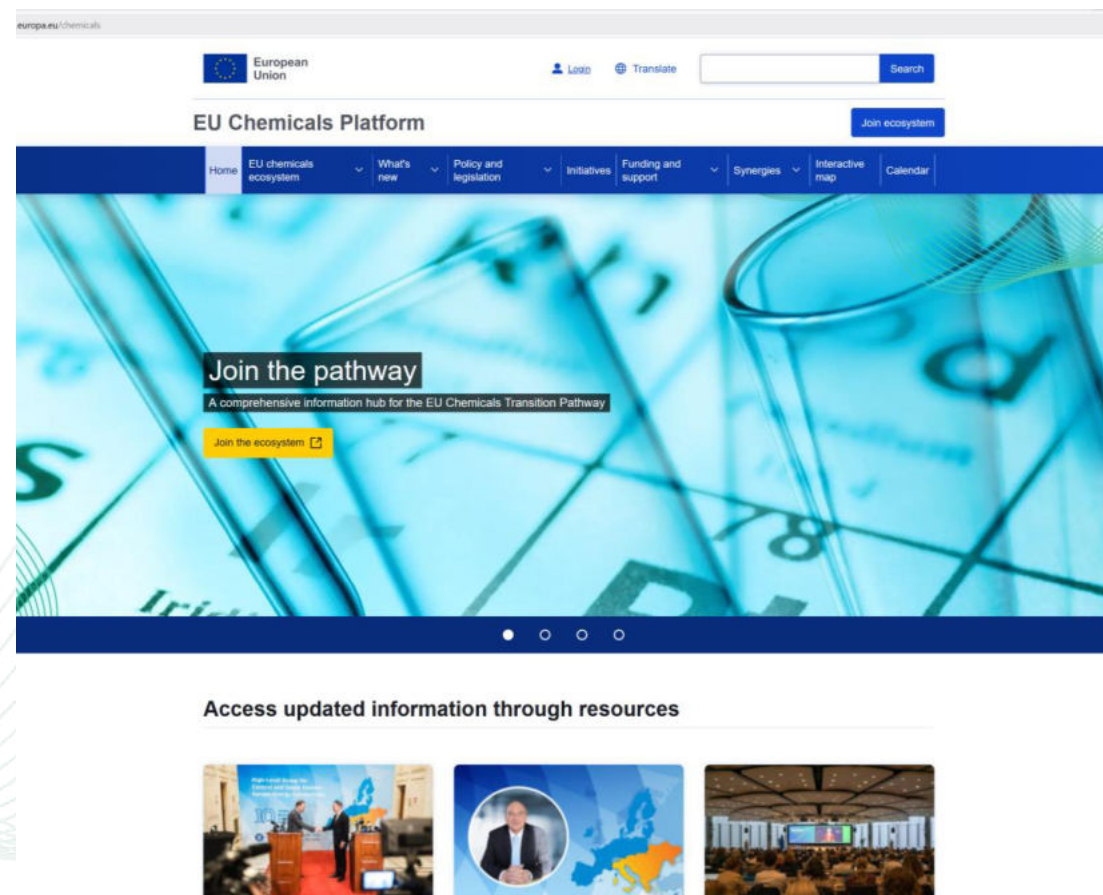
# Join the platform

- Stakeholders can join the platform by clicking on the “Join the ecosystem” tab
- Use of ECAS account to join and log in



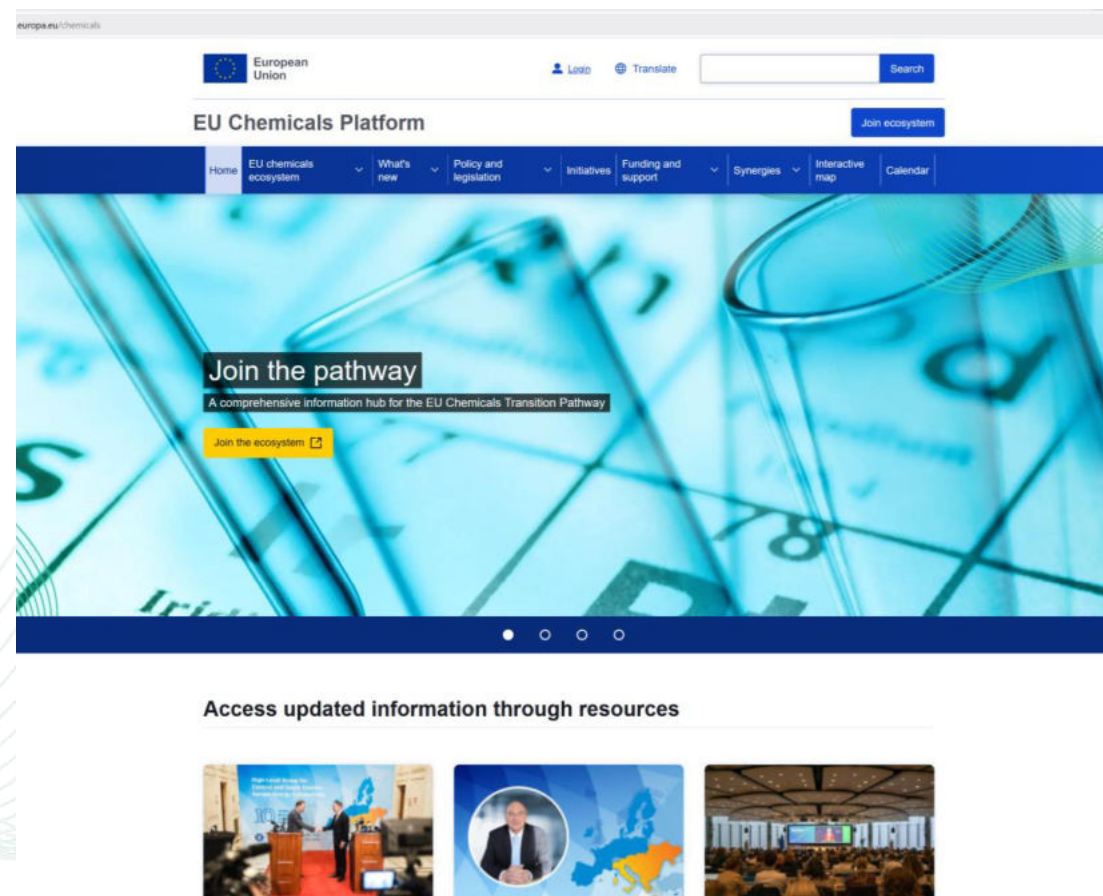
# Platform categories

- **Home:** all information collected in one place
- **EU Chemicals ecosystem:** sectorial reports and statistics, all relevant to the Chemicals ecosystem
- **What's new:** news and multimedia relevant to the sector
- **Policy and legislation:** regulatory and policy updates relevant to the green and digital transition
- **Initiatives:** sum of stakeholder initiatives submitted so far
- **Funding and support:** EU and national funding instruments relevant to the sector
- **Synergies:** sectoral and cross-sectoral synergistic actions
- **Calendar:** all time sensitive actions



# Join the platform here:

<https://transition-pathways.europa.eu/chemicals>







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