

# SusChem as a Hub to support and monitor challenges and opportunities for sustainable supply chains

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## 1. Introduction

The present paper will provide an overview of SusChem GR's initiatives and highlight its role as a hub for supporting and monitoring challenges and opportunities in sustainable supply chains for materials and products generation. SusChem is the European Technology Platform for Sustainable Chemistry which operates as a forum that brings together industry, academia, governmental policy groups and the wider society. It aims to implement the vision for a competitive and innovative Europe, where sustainable chemistry and biotechnology collectively will provide solutions for the future generation of process and products. This vision is pursued through priority areas, led by industries, including Resource and Energy Efficiency, Water Use and Management, Raw Materials, Smart Cities, Enabling Technologies, and Education.

## 2. SusChem GR [1]

SusChem GR, which was founded in 2016 by the National Technical University of Athens (IPSEN Unit), is one of the 17 National Technology Platforms, which are members of SusChem ETP. During its lifetime, it brought together national stakeholders and fostered a two-way communication at the European level; by promoting Greek priorities in the European research agenda for sustainable chemistry; and by advancing the national strategy for sustainable chemistry according to the European vision. Its members include the Hellenic Association of Chemical Industries, the Centre for Renewable Energy Sources, the Greek Association of Environmental Protection Companies, the Association of Greek Chemists, the Hellenic Association of Chemical Engineers, the Panhellenic Union of Bioscientists, the Hellenic Coatings Association and the General Consumers' Association of Greece.

SusChem GR actively has been supporting and encouraging SMEs to participate in EU projects and provide training and education services. It is also responsible for exchanging information within the SusChem network, other Member States, the EU Commission and any other organisation that may be of interest to the SusChem activities.

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<sup>3</sup> SusChem GR; <https://suschem-gr.org>

### 3. SusChem GR as partner of IRISS Project [2]

“IRISS – International ecosystem for accelerating the transition to Safe-and-Sustainable-by-Design (SSbD) materials, products and processes”, is a three-year project, started in June 2022. It is funded by the EU’s framework programme for research and innovation, Horizon Europe. Within the project duration a permanent structure will be built for long-term operation of established expert’s network with the involvement of wider communities. SusChem GR as one of the 4 NTPs attending as partners to the project, and as a regional hub, coordinates the dissemination activities for South-West region; communicates the current SSbD related initiatives in the region; contributes to the identification of the information, training and education gaps and overall, supports the integration of the SSbD framework into the roadmap of the Chemical Industry and the national research and innovation policy agendas. Moreover, it fosters the establishment of a sustainable network for long-term collaboration among network members, extending engagement to partners beyond the consortium, both during and beyond the project’s duration. Additionally, the priority value chains at both national and project levels has already been identified, and an action plan has been developed to communicate the SSbD concepts relevant with these value chains to national stakeholders and to explore the crucial issues for each value chain.

### 4. SusChem and Sustainability Section of European Federation of Chemical Engineering (EFCE)

Sustainability has been identified by EFCE, as a driving force to develop new business models that promote interactions in the context of circular economy. Chemical engineering emerges as a core discipline to scale up lab chemistry into industrial-scale processes, to screen processes for overall economic viability, to upscale waste to valuable feedstocks, and to target material and energy efficiency using a wide variety of technologies in process, energy, and systems integration. To that purpose, EFCE has prepared the formation of a new section with a vision to promote the rebuilding of industry, using a systemic and holistic approach and addressing the critical challenges of sustainable development as a coordinated working party. SusChem infrastructure and network is expected to play a key role in the activities of the Section, bringing the state-of-the art view of Chemical Industry on the sustainability challenges and contributing to the exchange of knowledge and experiences.

### 5. Conclusions

SusChem NTPs are anticipated to play a pivotal role in the transition toward Safe-and-Sustainable-by-Design innovation, addressing a societal imperative by ensuring a toxic-free environment and resource preservation. Considering the complexity inherent in adopting a system and lifecycle approach for this transition, SusChem NTPs can serve as catalysts between industry, academia, and policymakers, providing access to the essential tools, knowledge, and networking capabilities necessary for decision making to address this challenge.

### 6. References

[1] <https://suschem-gr.org/>

[2] <https://iriss-ssbd.eu/>

[3] [https://efce.info/Section\\_Sustainability.html](https://efce.info/Section_Sustainability.html)