



IVL Swedish Environmental Research Institute

Sweden's leading organisation for applied
environmental and sustainability research

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Vice President, Research

IVL Swedish Environmental Research Institute – the independent research institute

OUR VISION, A SUSTAINABLE SOCIETY:

- A sustainable society that drives the transition by :
- Taking science to society
 - Turning environmental problems into opportunities
 - Changing linear processes into a circular economy

All of our profits are invested in research for the future

WE WORK WITHIN THREE THEMATIC AREAS:



Sustainable environment



Sustainable transition



Sustainable society

We conduct applied research and consulting projects in the environmental field

WE OPERATE IN:



Sweden, India and China

+400 employees
Chemical laboratory facilities, test sites for WWTP, marine research and innovation, water management....

IVL Swedish Environmental Research Institute is a Ltd company owned by a foundation formed by an industry and government initiative in 1967.

IVL and chemical safety

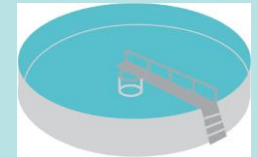


Environmental chemistry



Regulatory support to industry

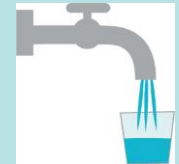
Circular economy, sustainable resource use



Life-cycle sustainability assessment



Hazardous substances in products and materials



Safe and sustainable by design





Mistra SafeChem

To enable a green and sustainable chemical industry

INDUSTRY PARTNERS



RESEARCH PARTNERS



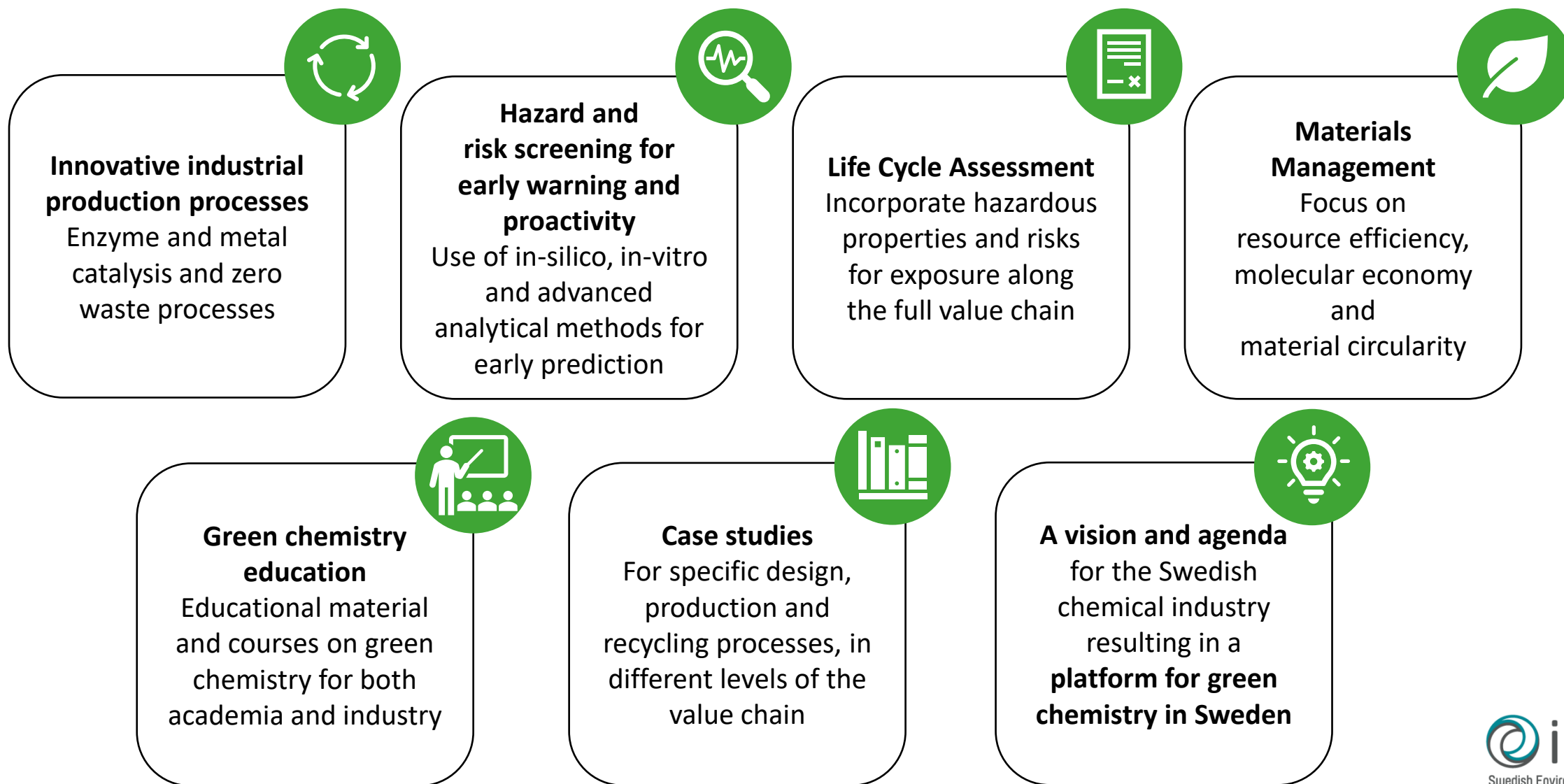
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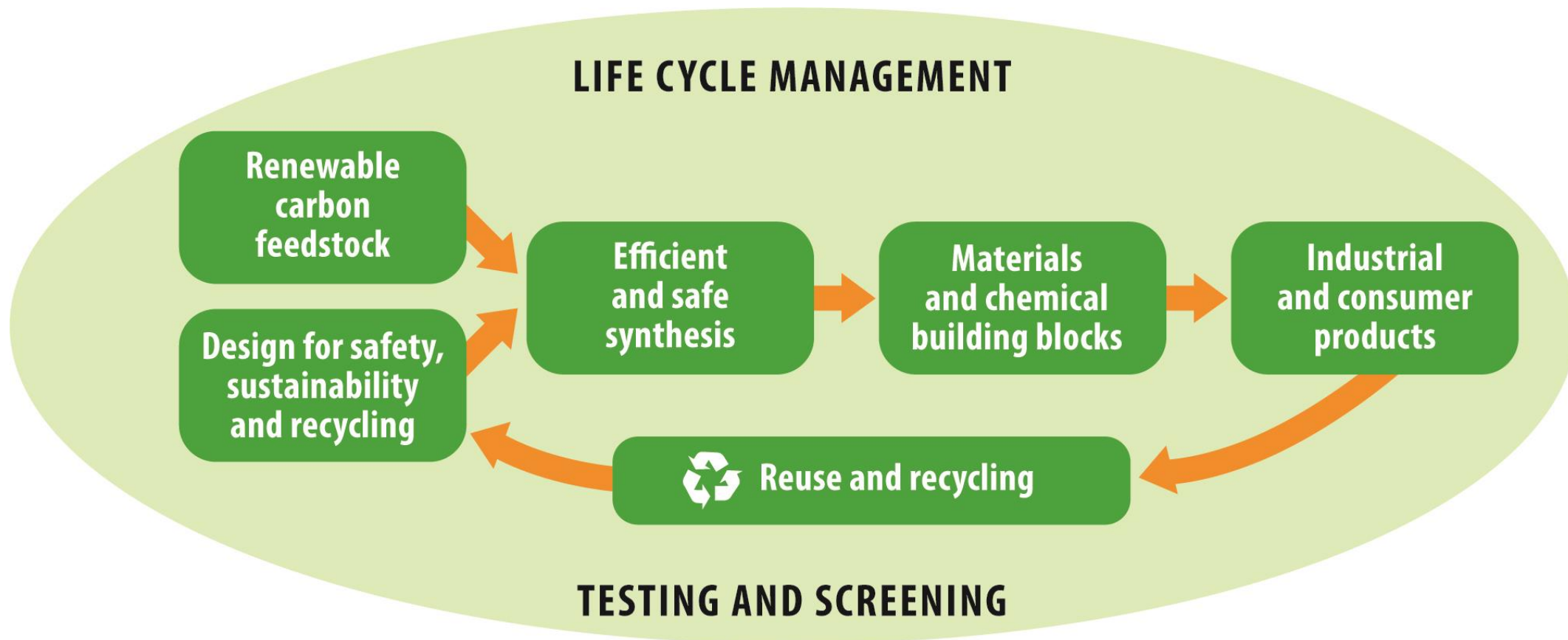
What is Mistra SafeChem?

- What?** A research programme targeting **green and sustainable chemistry** with a **holistic approach to chemicals**.
- How?** By developing and testing **new synthesis processes, tools for improved risk assessment and life cycle management** the scientists hope to **predict and avoid risks already in a design phase**.
- Who?** A consortium led by IVL Swedish Environmental Research Institute runs the programme. Five other research partners and twelve industry partners participate.
- Funds?** SEK 70 million (€6.7 million) from Mistra over four years – Mistra's largest initiative to date. The partners contribute with additionally SEK 30 million.
- When?** Granted 2019, started summer 2020, runs to 2024

Key aims and approach



Key components of a green and sustainable chemistry



Follow Mistra SafeChem

- Programme website:
www.mistrasafechem.se
- Sign up for our newsletter
- #MistraSafeChem
on LinkedIn
- Conferences, webinars

The screenshot shows the Mistra SafeChem website homepage. At the top, there is a navigation menu with links for 'ABOUT THE PROGRAMME', 'NEWS', 'RESEARCH PARTNERS', 'INDUSTRY PARTNERS', and 'DELIVERABLES'. A search icon is also present. Below the navigation is a large green banner featuring a close-up of laboratory glassware. A dark blue box on the banner contains the Mistra SafeChem logo and the text: 'Mistra SafeChem Safe and Efficient Chemistry by Design. Mistra SafeChem is a research programme for green and sustainable chemical industry.'

Below the banner, a central text block states: 'The vision of Mistra SafeChem is to enable and promote the expansion of a safe, sustainable and green chemical industry.' It further explains that the programme is based on twelve principles of green chemistry and that the research combines innovative manufacturing processes with hazard and risk screening, and life cycle assessment.

A prominent button in the center reads 'Read the Mistra SafeChem annual report for 2021'.

At the bottom, there is a 'News' section with a 'Show more' link. It features a carousel of four news items with images and dates:

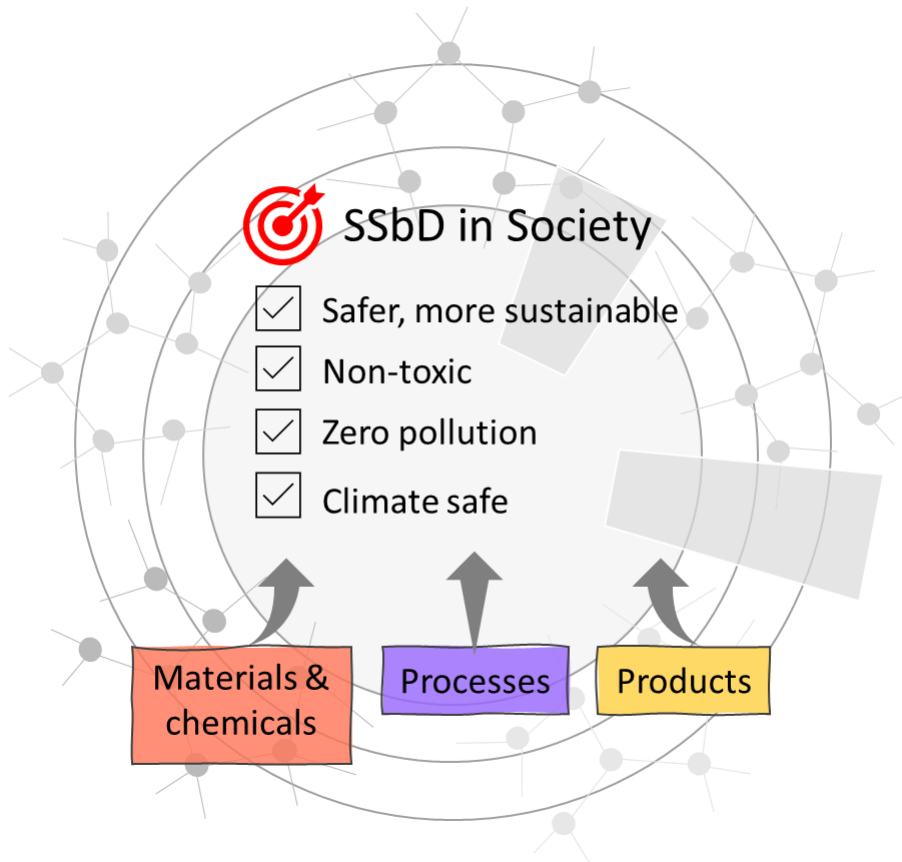
- 23 Jun 2022: A desire to use knowledge to create a sustainable
- 7 Jun 2022: Sustainable applications and solar energy conversion
- 1 Jun 2022: The father of green chemistry keynote speaker at the
- 25 May 2022: See all we



IRISS - the InteRnational ecosystem for accelerating the transition to Safe-and-Sustainable-by-design materials, products and processes



Scope of the project



The IRISS project aims to connect, synergize and transform the SSbD community in Europe and globally towards a life cycle thinking

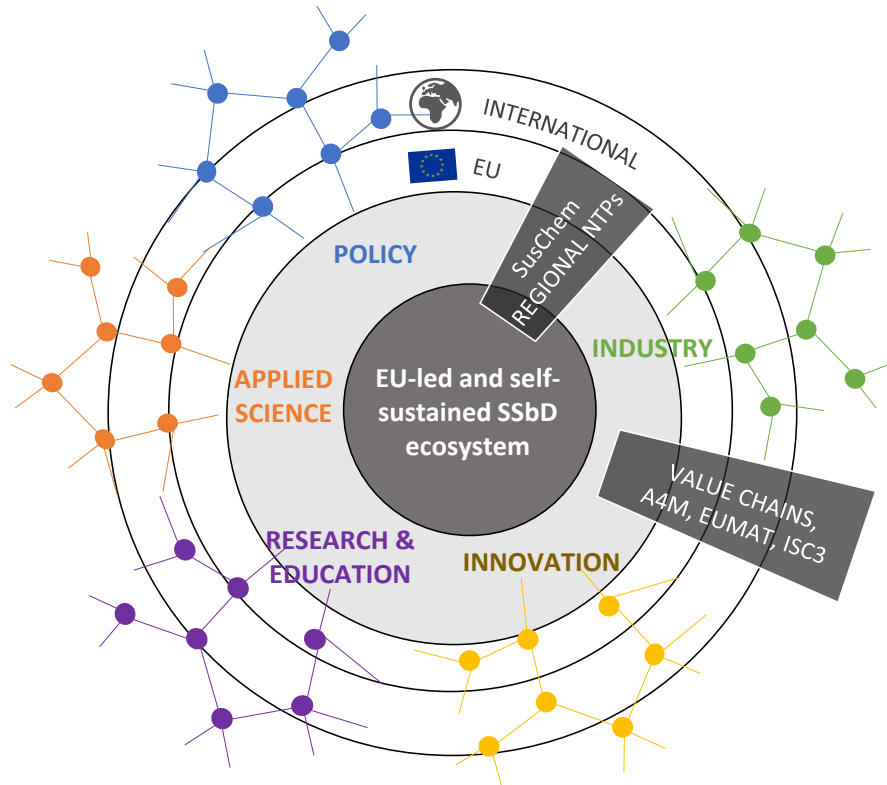
- Building, sharing and transferring the skills and knowledge on SSbD
- Develop a global permanent network for long term cooperation between the networking members, engaging partners beyond the consortium, throughout and beyond the duration of the project
- Focus on materials including both products and processes, considering the extensive progress to-date in chemicals and nanotechnology fields
- Strongly support the SSbD implementation in industry to achieve more safe and sustainable products for society
- Establish cooperation mechanisms with relevant international initiatives to align and leverage the extensive international community
- Establish collaboration with industry, EC and the projects that are working with SSbD concepts

Building an International permanent SSbD community

- A structure for continuous cooperation and services to network members, potential members, network associates as well as other stakeholders with interests in SSbD
- Definition of services provided by the platform and testing of services addressed to different key target groups
 - Training service for SMEs
 - Service for start-ups to boost business collaboration with industry
 - Co-creation service to establish hubs for specific value chains
 - Knowledge exchange services
 - Knowledge sharing services



IRISS Consortium



National Institute for Public Health and the Environment
Ministry of Health, Welfare and Sport



Empa

Materials Science and Technology



NATIONAL TECHNICAL UNIVERSITY OF ATHENS





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LinkedIn: IRISS – International SSbD network

The Basta-system

- BASTAonline is a system to phase out harmful and hazardous substances in construction products
- BASTAonline is owned by IVL Swedish Environmental Research Institute and Swedish Construction Federation
- Public database and API with information about
 - Requirement level
 - Circularity 
 - Renewable 
- Logbook service tot construction projects



Search among 170 000 environmentally evaluated products

Product name, Article no, Supplier..

SEARCH

BASTA provides you with tools to help choose non-hazardous materials. Our system is scientifically based with the purpose to phase out substances of concern from building and construction products.

Why BNN Association?

- Increase our knowledge exchange and dialogue on safe and sustainable chemicals, materials and products
- Contribute with our knowledge and long experience in research on safe chemicals, green chemistry, life cycle perspectives for materials and circular solutions
- To find new partners and new opportunities for research and innovation in the field of safe and sustainable chemicals and materials.
- Explore up-coming opportunities in Horizon Europe 2023-2024

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