



# Towards a Safe and Sustainable Future

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# WHAT IS SSbD?

## All you need to know about SSbD and how to use it to make changes to everyday life

Nobody wants to use products that are not safe for humans or the environment. How do we ensure we are on the right track? With SSbD.

"Safe-and-Sustainable-by-Design" (SSbD) **is a holistic strategy** that has been recently developed as a driver for innovation in European manufacturing to meet climate change targets by 2050. Its groundbreaking concept involves applying safety and sustainability principles in product development at the earliest possible stage. ***In practical terms, this means that SSbD integrates safety and sustainability in the innovation process, starting from the very beginning of the design of a new material or product, rather than waiting until the end of product development to address features that might be unsafe or unsustainable.***

SSbD ensures that new products have little to no negative impacts on human health and the environment while still working effectively.

### What does it mean in practice?

By applying SSbD from the design and conception stage of any new product or technology, industry strives to protect human and planet health, respect planetary boundaries and consider ethical socio-economic aspects and equity, throughout the whole life cycle of the product.

In a nutshell this means:

- SSbD ensures products are as ***safe and sustainable as possible for you and your family*** to use (e.g., an innovative detergent containing SSbD chemicals and fragrances).
- SSbD also ensures that products are as ***environmentally friendly as possible along their whole life cycle***, from manufacturing to

end of life (e.g., made using production processes and components that do not pollute water, soil or air, do not exacerbate natural resources, minimize the use of energy in their manufacturing and are easily recycled or completely biodegradable, and that neither the product itself nor its components are harmful or toxic to plants or animals).

- Related social impacts of products, such as ***ethical and safe working conditions*** during production, as well as ***human rights*** and the benefits the products provide to society are considered. Clear and accessible information about safety and sustainability data is available for the consumer.
- The ***economic viability*** of products, such as production costs, market prices, but also the use of critical raw materials, has been analyzed in the in-design phase. This ensures not only fairness and reasonable pricing for consumers but also sustainable supply chains, which is an important aspect for any investment.

### What is SSbD?

*SSbD is the smart way of innovating – safer, more sustainable and fair and therefore better for everyone. It is an initiative that seeks to transform the way we produce and consume, putting health and the environment at the heart of everything. By choosing and supporting SSbD products, you are making a conscious and responsible consumer choice.*



## Relevance of SSbD at a glance...

One of the most important features of SSbD is that it is a proactive approach rather than a reactive measure. It is implemented and applied during the design phase of products, promoting and ensuring ***safety and sustainability along with functionality.***

SSbD is crucial for building a more sustainable and resilient future. It emphasizes a holistic approach of the product lifecycle, covering all the different stages a product undergoes during its lifetime - ***from how a material is sourced, used, and ultimately disposed of*** - aiming at the same time to minimize environmental impact.

SSbD also pushes industry towards ethical and socio-economic responsibility since it aligns economic goals with ethical considerations, balancing profitability with responsibility towards the planet as a whole – ***it considers on an equal basis economic, societal and environmental impacts of products.***

Moreover, SSbD is based on comprehensive and inclusive design solutions since all relevant stakeholders (i.e., industry, academia and policy actors) are considered to be involved in creating and defining it, bringing in unique perspectives, knowledge and concerns.

### ***Why does SSbD matter?***

*Because SSbD encourages the development of cleaner, safer, more sustainable and fair innovations by:*

- 1. protecting your health*** by supporting the development of safe products
- 2. protecting the environment*** by ensuring the reduction of pollution and preservation of natural resources for future generations, and
- 3. improving social equity*** through the promotion of fair and ethical labor practices and ensuring access to safe and healthy products.



## Importance of citizens' consciousness about SSbD, and what citizens can do

Citizen awareness about SSbD is essential. Civil society plays a pivotal role, as citizens are both final consumers and end-users who purchase SSbD products. Therefore, it is you who can promote and support the implementation of the SSbD approach.

It is well known that consumers have been, are and will always be the real drivers of change. It is also clear that the world needs to move towards a cleaner and more sustainable model of production and consumption. By choosing to buy products that have been developed through the SSbD concept, citizens are exercising their right to a healthier and more sustainable planet and a fairer future.

Citizens' awareness about SSbD is key for several reasons, such as:

- **Informed consumer choices:** Understanding SSbD empowers citizens to make informed purchasing decisions, i.e., to select products designed with safety and sustainability in mind.
- **Driving change through demand:** citizens' awareness of the benefits of products conforming to SSbD can significantly influence market trends and send a strong message to businesses that SSbD is important. For example, when you actively seek out products with eco-labels, natural ingredients and sustainable production processes, you send a clear message to the market which will be heard!



This pressure towards what is safer, more sustainable and fair helps to incentivize companies to innovate and offer products that meet these criteria and forces them to implement SSbD when developing new products.

- **Protection of public health and the environment:** Citizens that understand the impact that safe and sustainable products have on humanity and the planet ensure development towards a healthy society and a sustainable environment, now and for the future. SSbD products consider the reduction of pollution, the maintenance of animal species (biodiversity), the preservation of resources and the mitigation of climate change.

- **Promoting social responsibility:** Citizens can contribute to a more just and equitable society by supporting companies, or putting pressure on them, depending on the fair labor practices these companies have, as well as their ethical sourcing. Through contributions on surveys, online reviews and social media, citizens can voice their opinion about companies' practices.
- **Education and awareness:** Citizens and consumers can become sustainability ambassadors by sharing information about the benefits of SSbD products with family, friends and within their own communities. This helps to raise even more awareness about the importance of consuming responsibly.

### **What can Citizens do?**

*Citizen awareness of SSbD is crucial for driving the transition to a safer, more sustainable and equitable future. By making informed choices and supporting businesses that prioritize SSbD principles, citizens play a vital role in shaping a healthier, more sustainable and fairer world for everybody.*



***Where to find more SSbD information?***

*Visit the website [www.iriss-ssbd.eu](http://www.iriss-ssbd.eu)*

*Want to stay engaged, explore follow up activities, and report your experience in our upcoming surveys?*

*Follow IRISS-International SSbD Network on LinkedIn*



Note: This report was created within a project funded by the European Commission within the Horizon Europe Framework Programme named "IRISS – The international ecosystem for accelerating the transition to Safe-and-Sustainable-by-design materials, products and processes". The project lasts 3 years (from June 2022 to May 2025) and is composed by 22 different entities, experts in relevant fields related and necessary for the understanding and translation of the Safe-and-Sustainable-by-Design (SSbD) concept to different types of sectors, including textiles, energy, fragrances, electronics, automotive, construction and packaging.

