

## EcoDesign

EcoDesign is a design approach that considers the entire life cycle of a product, from its conception to the end of its useful life, with the aim of minimising waste and environmental impact, EcoDesign includes a synthesis of innovative design strategies, sustainable material choices, and comprehensive end-of-lives management.

**VET:** How can you ensure that a T-shirt is environmentally friendly and does not harm the environment during design, production, use and when you no longer need it?

**HEI:** What strategies are needed to ensure an approach that considers entire life-cycles of a product?





## Biobased

Biobased material are considered sustainable depending on many factors, including recyclability and how they are made and how they can rejuvenate clothing. Biomaterials are considered circular when they can decompose into the ecosystem or can be easily recycled/reused.

**VET:** How can you change to a biobased materials?

**HEI:** How can you create a system that restores clothing in use by biorejuvenating the material or coating?





## Environmental accounting

Recording a comprehensive set of environmental indicators, such as water, energy, carbon, chemicals, land use, air pollution. This will pave the way for CSRD compliance and needs to be developed to assess the impact of product service lifetimes.

**VET:** What information do you need (including from suppliers) to understand how many resources are used?

**HEI:** Does a Life Cycle Analyses of environmental accounting support the adoption of new materials compared to mainstream or current practices?





## **Extended Producer Responsibility (EPR)**

EPR requirements ensure that producers are responsible for post use waste and recycling as well as pre-consumer waste (unsold production). When done using a product, users take them back to the place they were purchased for reuse and recycling. To close the loop and reduce this fiscal load, companies need to devise processes that facilitate repair, re-use and recycling of their products from the beginning.

**VET:** How would you reuse the materials of the things that you make?

**HEI:** How can you create long use materials that are easy to recycle when they return to you, often seven years from now?







## Design For Disassembly (DfD)

DfD requires designing the recycling phase while designing the garment product or system. Thinking about the End-of-lives first improves the chances of the textile being recycled or upcycled instead of being trashed. Melting stitching yarns and hand removable metal findings are examples.

**VET:** What could be changed in your project to enable disassembly?

**HEI:** What technologies can be used to make it easier to disassemble your product and salvage the materials?





## Collaborative Consumption

In collaborative consumption, users minimize the negative impact by sharing, swapping and exchanging clothes. This extends the use phase of garments and reduces the need for new clothing. Companies can engage resale, rental and remake platforms to reduce the overall consumption.

**VET:** How could you share your wardrobe with someone else?

**HEI:** What kind of services could you provide to promote this alternative business model?





## Waste Reduction

Waste is generated in multiple stages during the loopholes process: cutting, sewing, dyeing, finishing, washing, and more. Strategies like Zero Waste Pattern Cutting limit waste from the process.

**VET:** How can you design clothing that minimizes waste from the outset of the design process?

**HEI:** Which step in the value chain is generating most waste and how can you minimize the waste?





## Regenerative Fashion

Regeneration embodies practices that give back to people and planet. Examples include cultivating bioregional materials using crop rotation and intercropping to improve soil health. Another example is creating product-services that embody indigenous or ancestral knowledge (such as ways of making, materiality, and land management practices) directly with people from those communities, providing meaningful work.

**VET:** How do you make clothing that makes another system better?

**HEI:** What does your system look like from ground to wardrobe and back again?







## **Closed Loop Water and Renewable Energy**

Closed-loop water systems recycle and reuse water in production and use, conserving resources and pollution. Renewable energy uses sources like solar or wind power, reducing fossil fuel use and environmental impact.

**VET:** How can reusing water and using renewable energy like solar help make fashion better?

**HEI:** How can the integration of closed loop water systems and renewable energy sources in the fashion ecosystem contribute to sustainable production practices and reduce environmental impact?





## Design for Repairability (DfR)

Making something that it is easy to repair is an artform. Extended Producer Responsibility (EPR) requires repair (or recycling) of garments by the brand who sold it. Designing for the repair of the garment from the beginning makes the process easier and reuse/resale possible.

**VET:** What can you change in your current clothing to make it more repairable?

**HEI:** How can you Design for Repair (DfR) in a circular process? How might that change if seven years pass for the garment to go back to the company?





## Sustainable Packaging

Alternative solutions for packaging including biobased or recycled materials, increase the reuse of packaging, while minimizing the impact for example by reducing the amount and impact of packaging used.

**VET:** How can you make packaging that creates less waste?

**HEI:** How can you change your logistics in terms of procurement or packaging processes?





## Post-Use Materials

Post-use materials are textiles and garments that have finished their initial use. These textiles are recycled or upcycled to create new products, promoting a circular economy.

**VET:** How can we use old clothes and materials to make new things instead of throwing them away?

**HEI:** What are the challenges and opportunities associated with integrating post-use materials into new fashion products, and how can designers overcome these to support a circular economy?



