

CIRCULAR DESIGN GUIDE

CIRCULAR DESIGN GUIDELINES

With an ambition of becoming Circular by Design, it is our belief that designing for circularity will be a central pillar in a more sustainable future for the fashion industry.

For BESTSELLER, this entails considering all decisions made at each stage of the value cycle – from raw material, over production, through use and until recycling. All decisions taken by designers and product developers are critical for how a garment can become circular, as each decision impact all other phases positively or negatively.

Therefore, we want to introduce BESTSELLER's Circular Design Guidelines – a guide for all designers and product developers across brands on how to create a circular garment.

This is just the first step in the process. A circular design approach is a systemic shift and cannot be done by design and product developers alone. We need a collaborative approach involving your buyer, sales team, and extended network in the supply chain. The first step, however, could very well end up being the most impactful of them all.



DEFINITION

In BESTSELLER, Designing for Circularity is defined as “a systemic shift that brings forward new ways of using and designing clothing. From the outset, the design should ensure that the product can be part of a circular system. This means that products should be made from the approved Fashion FWD materials, be designed for optimal use of resources, last as long as possible and be recyclable”.

YOU CAN
MAKE A
DIFFERENCE

*Decisions made
by the designers and
product developers
determine how a
garment can be part
of a circular system*



THE CIRCULAR DESIGN MODEL



RAW MATERIALS

MADE WITH RENEWABLE, SAFE RECYCLED MATERIALS

PAGE 18

- Design with Better Materials
- Design with Best Materials



PRODUCTION

MADE WITH OPTIMAL USE OF RESOURCES

PAGE 19

- Design to Minimise Waste
- Design to Avoid Waste



USE

MADE TO LAST

PAGE 22

- Design for Durability
- Design for Longer Use



RECOVERY

MADE TO BE MADE AGAIN

PAGE 25

- Design for Recyclability
- Design for Disassembly



WHAT IS A CIRCULAR PRODUCT?

BROKEN DOWN INTO FOUR MAIN PRINCIPLES, A CIRCULAR PRODUCT SHOULD:

BE MADE WITH RENEWABLE, SAFE AND/OR RECYCLED MATERIALS



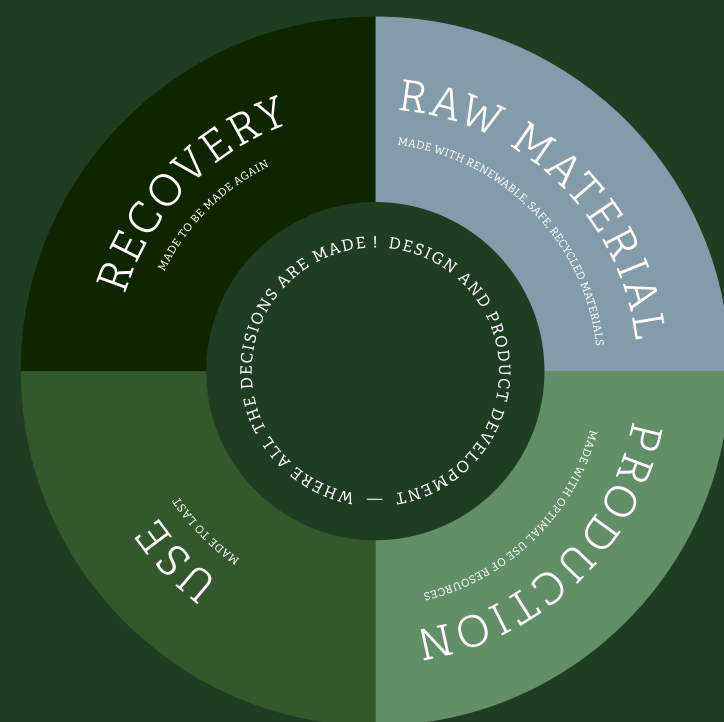
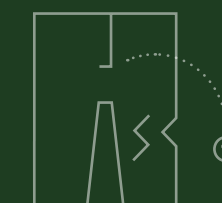
BE MADE WITH OPTIMAL USE OF RESOURCES



BE MADE TO LAST



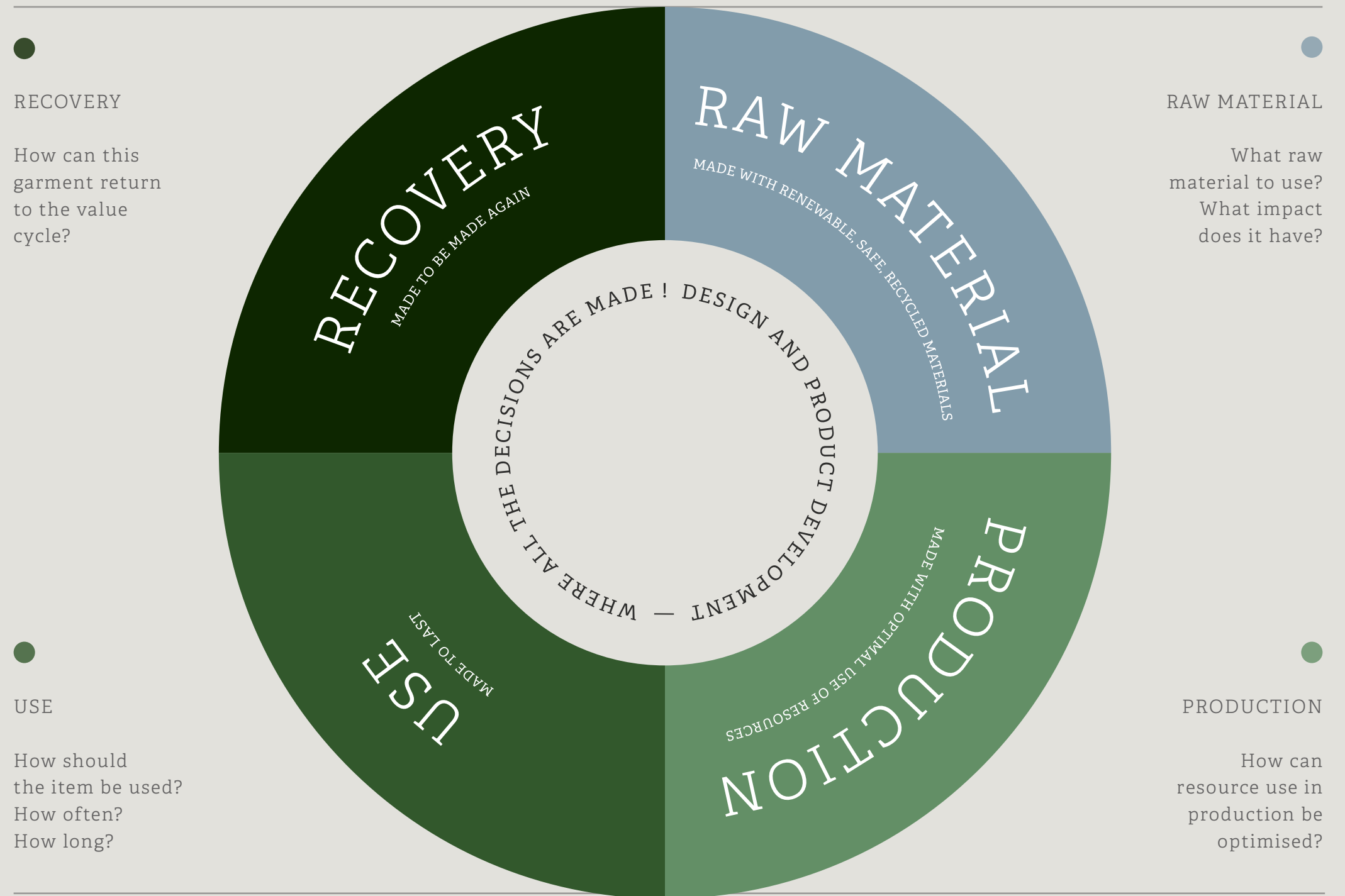
BE MADE TO BE MADE AGAIN



DEFINE PRODUCT JOURNEY

A key part of designing for circularity is to understand all stages throughout the entire value cycle and make sure that they speak to each other.

Therefore, at the outset of the design phase it is important to consider:

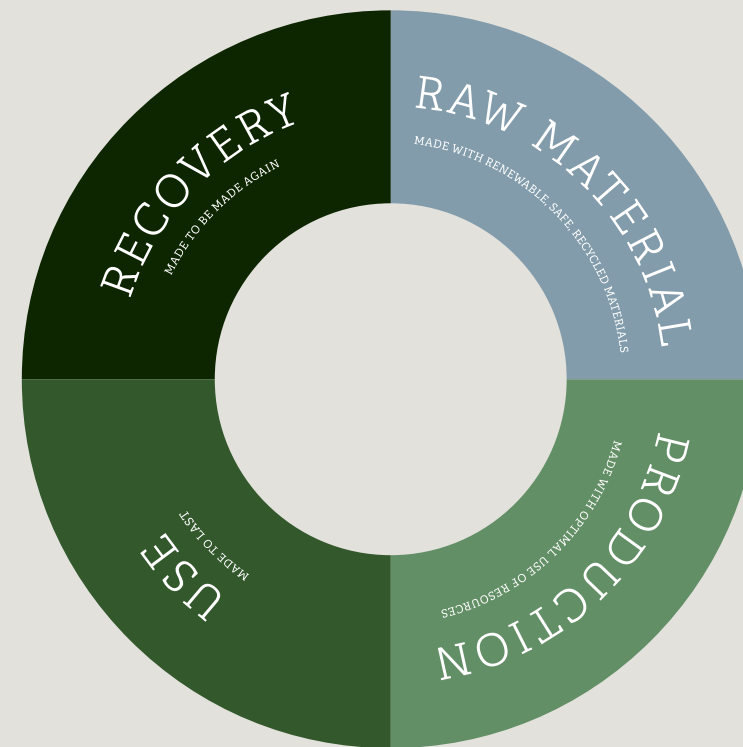


DESIGN CRITERIA

Our Circular Design Guideline is built around 3 different levels of complexity (good, better, best). Based on ambition and starting point, a designer can tap into the level of complexity that is best fit for a given situation.

Each step is made up of certain criteria. While new criteria are added others become more complex when moving from Good to Better and lastly to Best. The 3-step model explains what criteria belong to what level of complexity.

The following pages will take a deep dive into each criteria and explain what strategies can be applied to comply with the given criteria.



* Only relevant for styles with trims and layers in different material

		Design for Disassembly (Detachable Trims)*
		Design for Longer Use
	Design for Disassembly (Detachable Material)*	Design for Disassembly (Detachable Material)*
	Design for Durability	Design for Durability
	Design to Minimise Waste	Design to Avoid Waste
	Design for Recyclability	Design for Recyclability
	Design with Better Materials	Design with Best Materials (Including cotton, hemp and linen – all organic)
GOOD	BETTER	BEST

IN ACTION

THREE PRINCIPLE SKETCHES

PAGE 10 — 11

THE GOOD SWEAT

PAGE 12 — 13

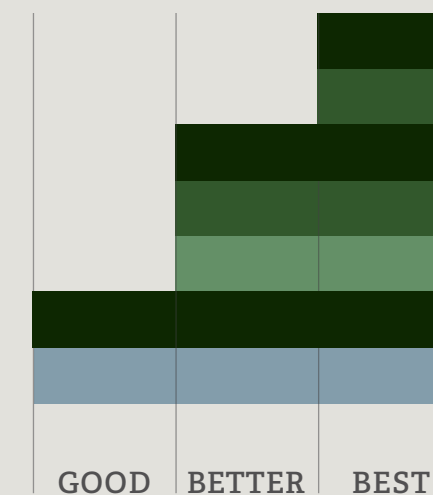
THE BETTER DRESS

PAGE 14 — 15

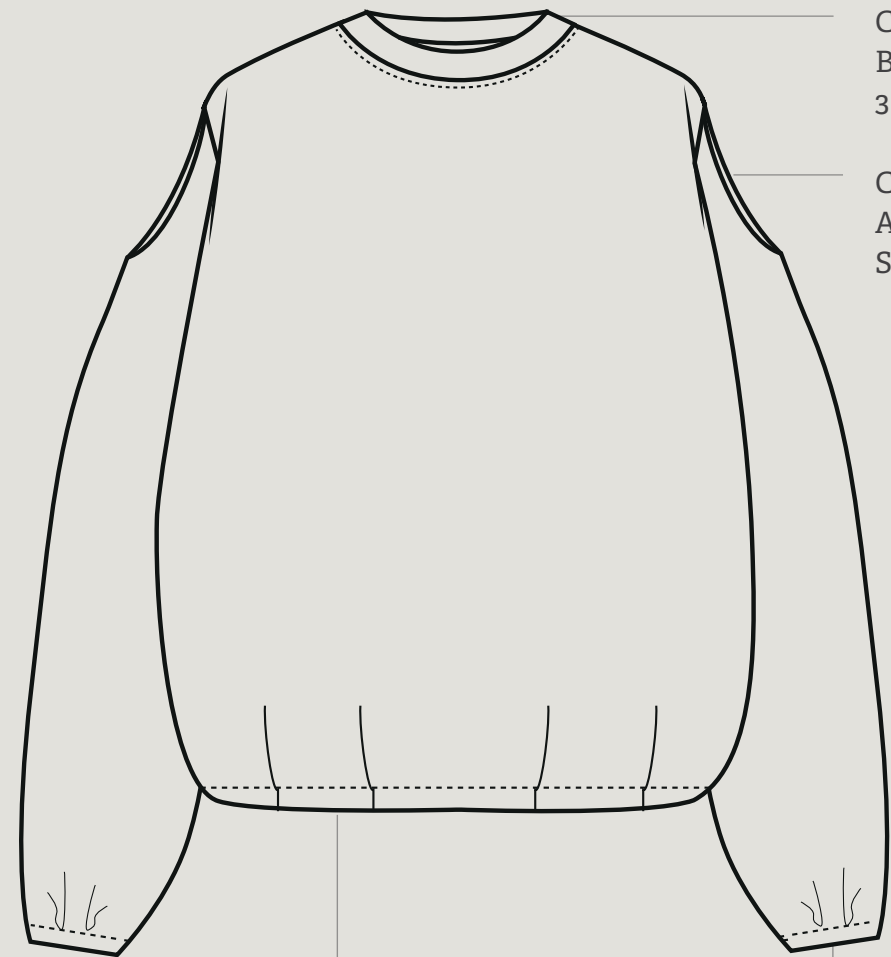
THE BEST JACKET

PAGE 16

TEMPLATE — TEST YOUR OWN STYLES



FITTING:
CROPPED AND
BOXY



COLLAR TO
BE SELF FABRIC
3CM HIGH

CUT OUT
AT TOP OF
SLEEVES

NECKLABEL + SIZE
TO BE PRINTED ON
ORGANIC COTTON
POPLIN AND ATTACHED
ON INSIDE OF SWEAT

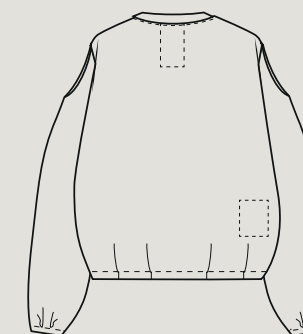
CARELABEL + MADE IN
TO BE PRINTED ON
ORGANIC COTTON
POPLIN AND ATTACHED
ON INSIDE OF SWEAT

PLEATS CREATING AN
ON-TREND BALLOON SHAPE

GATHERS IN CUFFS CREATING A
BALLOON SHAPED SLEEVE

*Design for
Recyclability*

*Design with
Better Materials*



RECOVERY

PRESENT RECIPE:
Monomaterial (98% cotton 2% polyester sewing thread)
Non-reactive dye

*Design for
Recyclability*

RAW
MATERIAL

BETTER MATERIAL:
100% organic cotton

*Design with
Better Materials*

2 — 2

THE GOOD SWEAT

GOOD

* Only relevant for styles with trims and layers in different material



*Design for Disassembly (Detachable **Material**)**

Design for Durability

*Design to **Minimise** Waste*

Design for Recyclability

*Design with **Better** Materials*

* Only relevant for styles with trims and layers in different material



RECOVERY

* Not relevant as all pieces are made from the same fibre composition

*Design
for Disassembly
(Detachable **Material**)**

USE

PHYSICAL DURABILITY: TENCEL™ LYOCELL is a sturdy material and the weave is a 3/1 twill making it more durable
AESTHETIC DURABILITY: The design of the dress is not connected to any trend. It is a style which can be used for many years without losing its value.

*Design
for Durability*

PRODUCTION

MINIMAL WASTE PATTERNS: Pattern creates little waste as it is more or less square pattern pieces + the labels inside are made from any off cuts
FEWER INPUTS: No buttons used

*Design to
Minimise Waste*

RECOVERY

FUTURE RECIPE:
Monomaterial (100% TENCEL™ LYOCELL)
Non-reactive dye
No trim of other quality than TENCEL™ LYOCELL

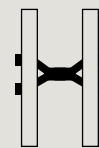
*Design for
Recyclability*

RAW
MATERIAL

BETTER MATERIAL:
100% TENCEL™ LYOCELL

*Design with
Better Materials*

* Only relevant for styles with trims and layers in different material

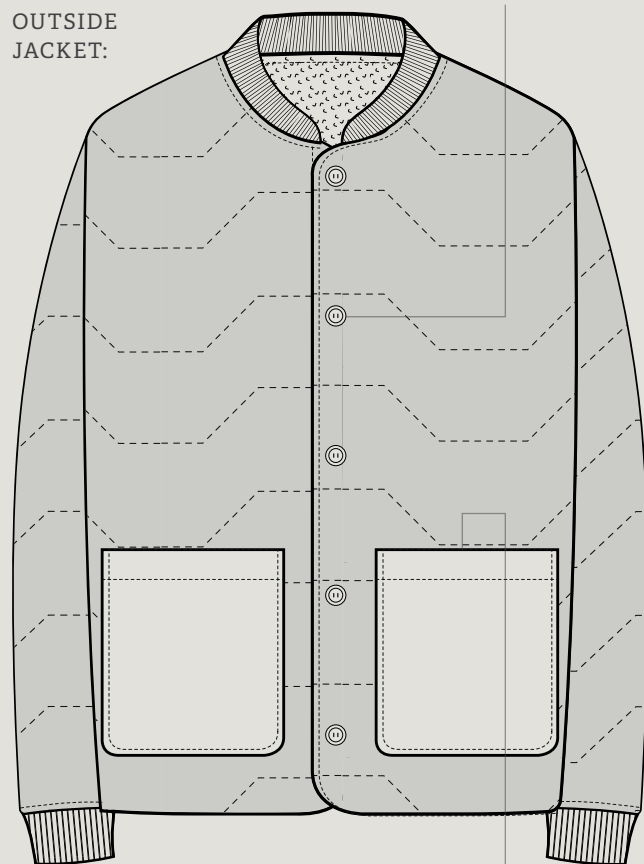


BUTTONS STITCHED TOGETHER TO BE ABLE TO BE USED ON BOTH SIDES ATTACHED THROUGH BUTTON HOLES SO THEY ARE EASILY DETACHABLE

PRINTED LABEL MADE FROM CUTTING WASTE FROM JACKET

PILE QUALITY INSIDE

OUTSIDE JACKET:



RECYCLED CARE LABEL ATTACHED INSIDE POCKET



INSIDE JACKET:

1X1 RIB RECYCLED POLYESTER

1X1 RIB RECYCLED POLYESTER

Design for Disassembly
(Detachable **Trims**)*

Design for Longer Use

Design for Disassembly
(Detachable **Material**)*

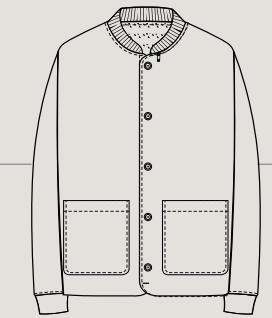
Design for Durability

Design to Avoid Waste

Design for Recyclability

Design with Best Materials

* Only relevant for styles with trims and layers in different material

RECOVERY	<p>DETACHABLE TRIMS: The jacket has detachable buttons. 2 buttons are sewn together with a 0.5cm long thread "neck" between them. The buttons are attached on the jacket through buttonholes.</p>		<p><i>Design for Disassembly</i> (Detachable Trims)*</p>
USE	<p>TRANSFORMABILITY: The jacket is reversible which means that the customer only needs to buy 1 jacket to have 2 different looks</p>		<p><i>Design for Longer Use</i></p>
RECOVERY	<p>*Not relevant as all pieces are made from the same fibre composition</p>		<p><i>Design for Disassembly</i> (Detachable Material)*</p>
USE	<p>PHYSICAL DURABILITY: The Polyester is durable and the weave 3/1 twill is very sturdy. The polyester rib will be looking nice for a long time AESTHETIC DURABILITY: The design is not connected to any trend. It is classic in the details. The style can be used for many years without losing its value REPAIRABILITY: The buttons are very easy to replace</p>		<p><i>Design for Durability</i></p>
PRODUCTION	<p>ELIMINATE CUTTING WASTE BY MAKING OPTIMAL USE OF IF: The cutting waste will be collected by the factory, sent to recycling facility and recycled</p>		<p><i>Design to Avoid Waste</i></p>
RECOVERY	<p>PRESENT RECIPE: Monomaterial (100% recycled polyester) Non-reactive dye</p>		<p><i>Design for Recyclability</i></p>
RAW MATERIAL	<p>BEST MATERIAL: 100% recycled polyester</p>		<p><i>Design with Best Materials</i></p>

* Only relevant for styles with trims and layers in different material

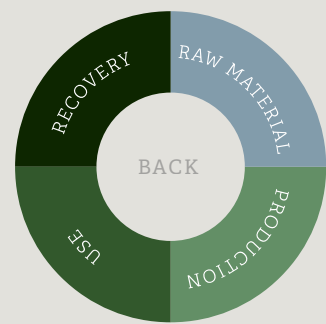
RECOVERY		Design for Disassembly (Detachable Trims)*
USE		Design for Longer Use
RECOVERY		Design for Disassembly (Detachable Material)*
USE		Design for Durability
PRODUCTION		Design to Minimise or Avoid Waste
RECOVERY		Design for Recyclability
RAW MATERIAL		Design with Better or Best Materials

FILL OUT & TEST YOUR STYLE:

GOOD	BETTER	BEST
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THE TOOL BOX

DIVING INTO THE FOUR VALUE STAGES AND THE STRATEGIES



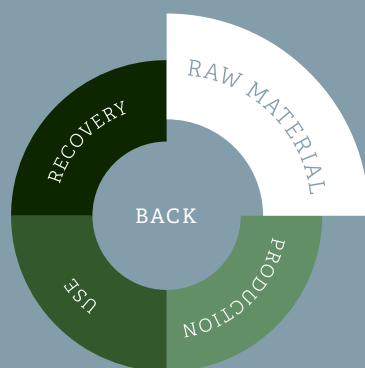
RAW MATERIALS

MADE WITH RENEWABLE, SAFE, RECYCLED MATERIALS

WHY IMPORTANT

Raw material production of some fibres has a negative environmental impact. Therefore, it is important to choose safe, renewable and/or recycled fibres as they have a lower impact than conventional ones. When designing for circularity always choose materials from the Better or Best categories.

The categorisation of the fibres into Standard, Better and Best is based on environmental impact where Best has the lowest impact of all.



FIBER	STANDARDS	BETTER	BEST
MMCF	Viscose, lyocell, modal	LENZING™ ECOVERO™, TENCEL™ LYOCELL, Livaeco by Birla Cellulose™ etc.	Circulose®, TENCEL™ x REFIBRA™, Liva Reviva by Birla Cellulose™ etc.
COTTON	Better Cotton	Organic cotton, in-conversion (organic) cotton	Recycled cotton from pre- or post-consumer waste
POLYESTER	Virgin polyester	rPET	Recycled polyester from pre- or post-consumer waste
HEMP/LINEN	Hemp, linen	Organic linen, organic hemp	Recycled hemp, linen from pre- and post-consumer waste*
WOOL	Animal fibre	Organic and/or responsibly sourced animal fibre	Recycled animal fibre

* Limited access to sourcing today, therefore considered to be a future fibre

PRODUCTION

MADE WITH OPTIMAL USE OF RESOURCES

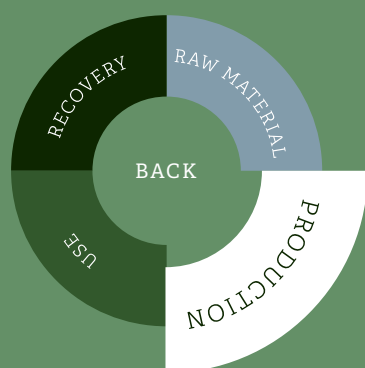
WHY
IMPORTANT

A lot of time and energy go into producing and transforming raw materials into products. Therefore, we need to optimise the way we use resources in production to create the least waste possible or none at all.



PRODUCTION
—
MADE WITH
OPTIMAL USE OF
RESOURCES

DESIGN TO MINIMISE WASTE



STRATEGY

USE FEWER INPUTS

Ask yourself, without compromising on the aesthetics, whether you can limit the inputs in a design

Is it possible to not use certain trims?
Or can a care label be applied in a smarter way?

MINIMAL WASTE PATTERNS

When applying a pattern to a fabric, producers can calculate the waste percentage

Sometimes by changing the pattern slightly without compromising too much on design and fit you can reduce the amount of waste

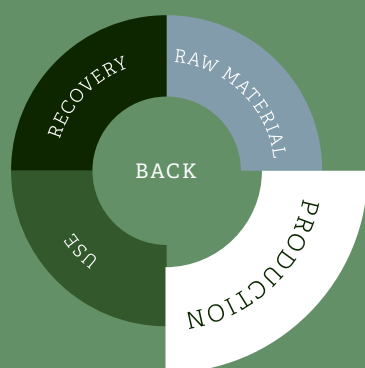
Making patterns so there is as little waste as possible

3D DESIGN

By making designs in 3D you can decrease sample production

PRODUCTION
—
MADE WITH
OPTIMAL USE OF
RESOURCES

DESIGN TO AVOID WASTE



STRATEGY

DIGITAL
SHOWROOM

Using the digital showroom to avoid making sales samples and thereby reducing waste as well as the overall use of resources

ZERO WASTE
PATTERNS

Making patterns utilising 99-100 percent of the fabric

FULLY
FASHIONED

Each piece of the style is knitted into shape thereby not creating any waste at all

ELIMINATE
CUTTING WASTE
BY MAKING
OPTIMAL USE
OF IT

Make sure that cutting waste is recycled

Make sure that cutting waste is repurposed into new products

USE

MADE TO LAST

WHY
IMPORTANT

The customer's willingness and ability to use a garment longer depends on the aesthetics, function, physical durability as well as emotional attachment.



USE
—
MADE TO
LAST

DESIGN FOR DURABILITY

What may determine a garment's continued use is its physical durability, aesthetics, and the user's emotional attachment. In addition, if durability fails, user needs to be informed and able to repair it.



STRATEGY

PHYSICAL DURABILITY

When designing for durability, fabric, construction, weave, and trim should be carefully considered in terms of life span and quality of each component. Consider also tear strength, abrasion resistance, pilling, shape resistance and colourfastness. Areas liable to stress such as the crotch, elbows, pockets etc. could be reinforced with extra fabric, sturdier fabric or by stitches / bartacks

EMOTIONAL DURABILITY

This strategy can be difficult to implement for the mass market. Consider if the style could have a solution for the consumer to become engaged in the product by attaching extra trims or dye for the customers to customize the product themselves.

Design something so special with limited production runs to encourage a stronger emotional bond making people want to keep it for longer or resell it. This can e.g. be done by custom-making a product or by adding hidden messages in the garment.

AESTHETIC DURABILITY

Classics, timeless, iconic designs with neutral colours and simple prints. Alternatively, design something that is so special that it will be interesting to wear for many years.

REPAIRABILITY

A piece can be designed with detachable and replaceable parts and constructed to be easy to disassemble so that only the broken pieces need replacement. Consider having repair guides for the customer to follow or adding spare components.

CARE

Creating care guidelines, such a stain removal, best ways to wash to make it last longer, de pill jumpers etc.

USE
—
MADE TO
LAST

DESIGN FOR LONGER USE

Another way to make a product last is to give the customer several use options and to make it relevant to as many as possible. The Design for Longer Use strategies demonstrate ways garments can be designed to be adapted and transformed by the user.



STRATEGY

MODULARITY

Divide the garment into smaller parts (or modules) which can be independently created, modified, or replaced to create a garment which can be combined in new ways or used independently. This creates a much more versatile garment which can cover different needs or change with the customer's needs

TRANSFORM- ABILITY

When designing think of multiple uses for the garment in styling or wear. Adding a drawstring can make an oversized style fitted or give a different shape. Design several styles in one – such as adding a detachable thermo layer to a coat – can make the coat last through seasons etc. or make the garment reversible

GENDER NEUTRAL

Designing iconic / classic pieces with inclusive fit and making the size range larger. Considering also classic colour ranges

ADJUSTABLE SIZING

Incorporating fit adjustments into the garments, e.g. by adding fastenings allowing to alter the sizing. Using drawstrings, buttons, or elastic to enable the customer to refit oversize garments. Incorporating adjustable hems and cuffs (especially for childrenswear)

REDESIGN

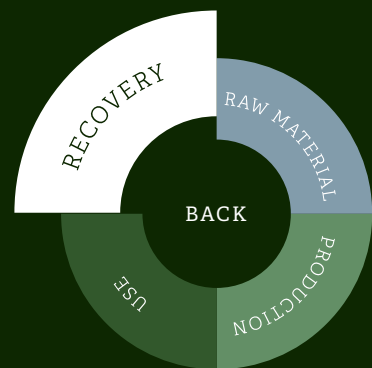
Give instructions on ways to redesign the product using dye or remaking it. E.g. for a pink dress give instructions on how to dye black to extend the life when pink is no more a wanted colour

RECOVERY

MADE TO BE MADE AGAIN

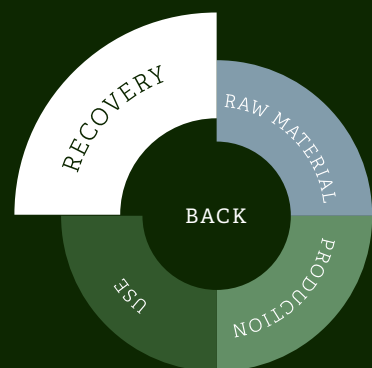
WHY IMPORTANT

The ability to recycle a garment depends on its fibre composition, applied colours and prints, as well as the possibility for disassembly which includes trims.



RECOVERY
—
MADE TO
BE MADE
AGAIN

DESIGN FOR RECYCLA- BILITY



PRESENT RECIPES

Recycling technologies can only handle certain fibres, fibre compositions and colours. To get more flexibility in the use of fibres and fibre compositions, the Design for Disassembly strategy can be applied.

As a rule of thumb, a product should always follow a present recipe if it is designed into a trend as the lifetime is expected to be short.

FUTURE RECIPES

New recycling technologies are constantly entering the market and we become better and better at handling our textile waste.

Therefore, if longevity (5 years) is considered in the design, other recipes fit for future recycling technologies may be used. However, as a rule of thumb, the purer a garment is, the more fit it will be for recycling. So, although it is possible to use future recipes, present recipes will be better.

FIBRE	PURITY MIN.	TECHNOLOGY
COTTON	98%	Chemical, mechanical
POLYESTER	98%	Chemical, mechanical
MMCF	N/A	N/A
HEMP LINEN FLAX	98%	Mechanical
WOOL	85%	Mechanical

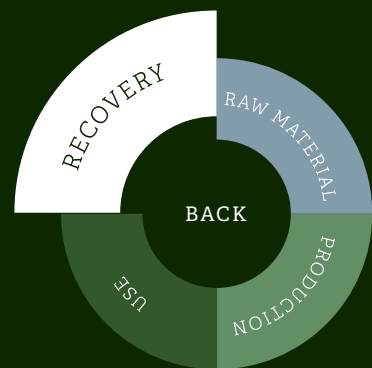
PURITY MIN.	TECHNOLOGY
70%	Chemical, mechanical
70%	Chemical, mechanical
100%	Chemical
98%	Mechanical
85%	Mechanical

RECOVERY
—
MADE TO
BE MADE
AGAIN

DESIGN FOR DISASSEMBLY

Designing for disassembly is a method used to optimise the recycling process and is therefore connected to the Design for Recyclability criteria. Design for Disassembly creates a way to design that is not limited to following the recipes for recycling as described under the Design for Recyclability criteria.

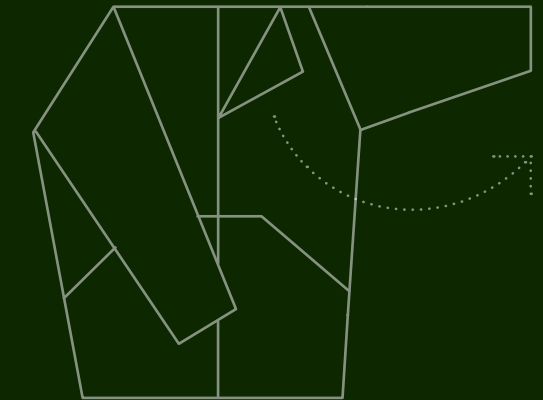
As of now, design for disassembly is crucial for recyclability, however as new technologies enter the market the need for disassembly might change.



STRATEGY

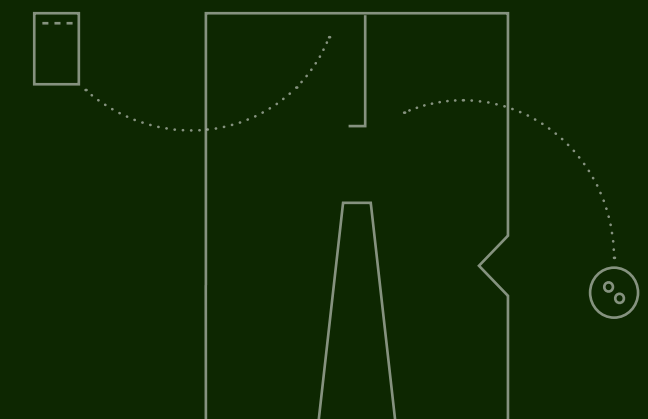
DETACHABLE MATERIALS

When designing for disassembly a designer can use different materials for the same garment, e.g. a cotton shirt with a detachable polyester lining.



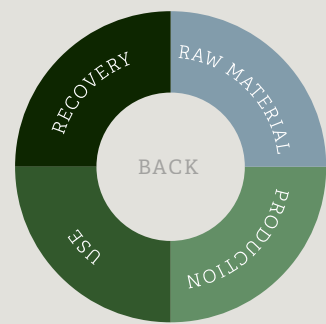
DETACHABLE TRIMS

Using fully detachable trims also optimises the recycling process. It makes the process faster and ensures that the most textile possible is recycled. You could work with a supplier to develop a button that can be screwed into place and unscrewed to be removed.



IN ACTION

BESTSELLER CASE EXAMPLES



STYLE

RAW
MATERIALS —
DESIGN
WITH BETTER
MATERIALS

RECOVERY —
DESIGN FOR
RECYCLABILITY

SUIT

BEST MATERIAL:
100% recycled polyester

PRESENT RECIPE:
Monomaterial (100% polyester)
Non-reactive dye



AWARE
by Vero Moda

STYLE

RAW MATERIALS
— DESIGN
WITH BETTER
MATERIALS

JEANS

98% organic cotton (and 2%
Roica V550 degradable elastane)

Patch made from jacron, a
leather-like material made from
renewable wood pulp

Pocket linings made from
100% organic cotton

RECOVERY—
DESIGN FOR
RECYCLABILITY

PRESENT RECIPE:
Monomaterial (98% organic cotton
2% Roica V550 degradable elastane),
non-reactive dye

Cradle to Cradle certified



JACK&JONES

STYLE

RAW
MATERIALS

RECOVERY —
DESIGN FOR
RECYCLABILITY

RECOVERY —
DESIGN FOR
DISASSEMBLY

USE —
DESIGN
FOR LONGER
USE

JACKET

Vest — 100% recycled polyester
Jacket — 100% organic cotton

Vest: 100% recycled polyester

Jacket: 100% organic cotton (shell)
+ 100% biodegradable viscose
from Freudenberg (lining).
Not designed for recycling, but
for decomposition.

DETACHABLE MATERIAL:
The vest and jacket which
are made from two different
materials can be separated

DETACHABLE TRIMS:
The buttons on the jacket
are easy to remove

MODULARITY:
The vest can be removed,
used outside of the jacket
as well as inside



.OBJECT

STYLE

1: FEMME KNIT

2: FEMME JEANS

3: HOMME KNIT

RAW MATERIALS

100% organic cotton

100% organic cotton Made in Africa

100% organic cotton

RECOVERY —
DESIGN FOR
RECYCLABILITY

PRESENT RECIPE:
Monomaterial (100% organic cotton)
Non-reactive dye

PRESENT RECIPE:
Monomaterial (100% organic
cotton made in Africa),
Non-reactive dye

PRESENT RECIPE:
Monomaterial (100% organic cotton),
Non-reactive dye

DESIGN FOR DISASSEMBLY:
When the product is finally worn out,
it can be disassembled for recycling.

USE —
DESIGN FOR
DURABILITY

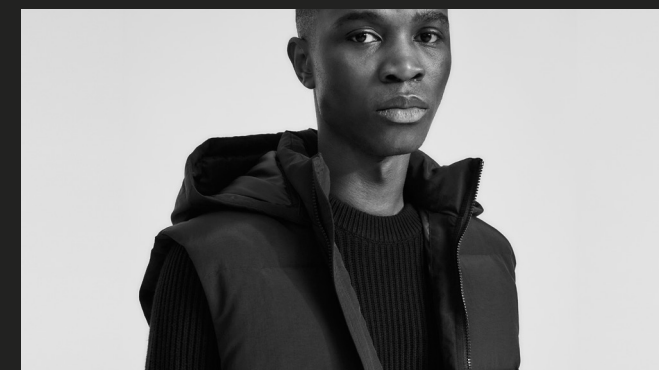
AESTHETIC DURABILITY:
Jeans were had a comfortable fit.
Classic design features

PHYSICAL DURABILITY:
knit had reinforced cuffs and hem
to strengthen stress points. Extended
neck tape inside to maintain shape

DESIGN
FOR LONGER
USE

MODULARITY:
Featuring zip-off sleeves for added
versatility once the day heats up. Easily
transforms into a trendy vest which makes
it a long-lasting styling option.

MODULARITY:
Could be transform into cropped
capri, Bermuda or shorts for a longer
wardrobe rotation. A versatile
styling addition.



SELECTED
FEMME / HOMME

LINKS

FIND OUT MORE ABOUT DESIGNING FOR CIRCULARITY

ELLEN
MACARTHUR
FOUNDATION

A new Textiles Economy: Redesigning fashion's future

ELLEN
MACARTHUR
FOUNDATION

Vision of a circular economy for fashion

GLOBAL
FASHION
AGENDA

Circular design Toolbox

BESTSELLER

*DSKD has contributed to the making
of the Circular Design Guide*

If you have any questions to this guide please reach out to us:

SUSTAINABILITY@BESTSELLER.COM