

## EuroWeb at the Festival of the New European Bauhaus 2024:

### Report

Between the 9<sup>th</sup> and the 13<sup>th</sup> of April EuroWeb was represented at the Festival of the New European Bauhaus, in Brussels. Following a successful participation in the first edition, in 2022, the Action once again applied and was selected to take part in this event, organized by the European Commission (EC), this time in collaboration with the Belgian presidency of the Council of the European Union.

The Festival is a major event, aimed at promoting and boosting the visibility and impact of the New European Bauhaus (NEB) initiative, an EC led program which serves as the social and cultural arm of the European Green Deal policy package. It is organized in three major sections: the Fest, which comprises performances and artistic showcases; the Forum, which hosts talks, high-level round tables and workshops; and the Fair, a showcase of selected projects aligned with the NEB values of sustainability, creativity, and inclusivity.

As in 2022, the Action was showcased in the latter section of the Festival, which this year also offered exhibitors the opportunity to organize an activity for the public in dedicated Workshop and LAB spaces, meant respectively for talks and hands-on activities. EuroWeb took advantage of this opportunity to organize a LAB event (see below).

#### 1. The booth and the LAB

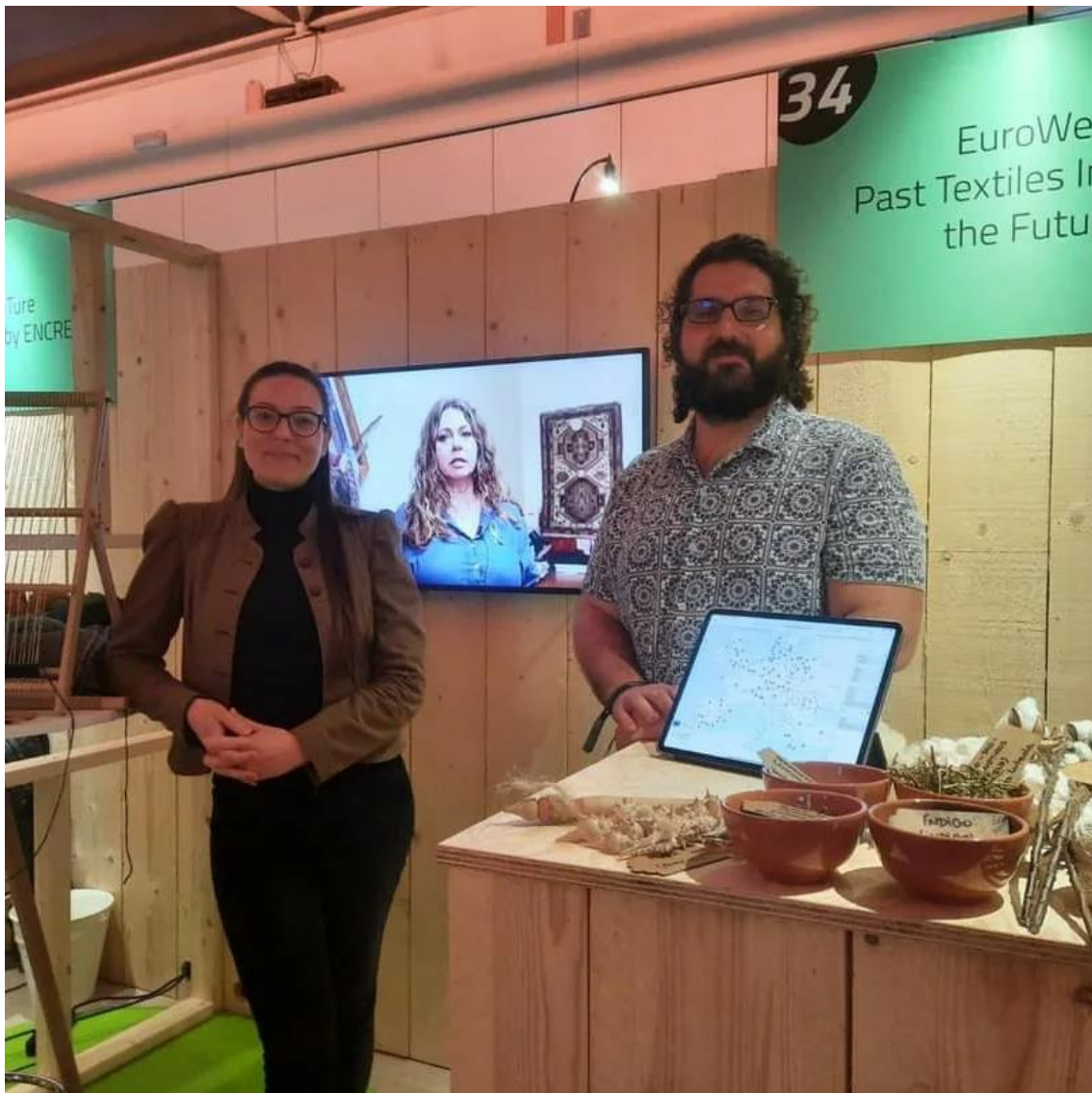
Together with 59 other projects, EuroWeb was represented at the Fair in a booth, equipped, as per our request, with a plinth for display, a table, and a screen. The booth was set up by the Action representatives on site, Francisco B. Gomes and Audrey Gouy, on the 8<sup>th</sup> of April, prior to the official opening ceremony of the Festival.

The display plinth was occupied by an interactive display of natural fibres in different stages of working (wool, flax/linen, esparto grass, hemp, cotton, and silk), natural dyes (weld, madder, cochineal, indigo, and murex), and traditional textile tools (spindles, carding combs, spools, rigid heddles). Next to this, an iPad was set up to showcase the EuroWeb Digital Atlas of European Textile Heritage, offering visitors the opportunity to explore this platform. A QR code was fixed to this plinth which directed visitors to [a dedicated page with resources for Fair visitors](#) set up specifically for the purpose of this event at the EuroWeb website.



On the other hand, the table was set up with a frame tapestry loom, together with its complimentary tools, and a selection wool in an array of colours. Action participants wove

on this loom throughout the Festival as a way to capture the attention of passers-by, and visitors were also offered the possibility to contribute to a 'collective tapestry'.





Finally, on the screen a wide selection of images from EuroWeb's activities and events were shown on repeat throughout the Festival, as were a range of representative videos from the Action's archives (e.g., videos prepared for the Festival in 2022, the Malia Training School documentary, Paula Nabais' and Agata Ulanowska's video on the EuroWeb Survey of the European Textile and Fashion Sectors, etc.).

As a complement to this permanent representation, on the 10<sup>th</sup> of April (10:30 – 11:30) a hands-on group activity was held on one of the Fair's LAB spaces, with the title 'Natural Fibres and Dyes: Exploring Traditional Materials for a More Sustainable Fashion Industry'. The participants (roughly a dozen in total, including the COST Scientific Officer for the Action, Rossella Magli) were given the opportunity to interact with an array of natural fibres and dyes, and to hear about their history, their uses, and properties. This hands-on experience was framed by a presentation of the Action, some pertinent facts and figures on the environmental impact of the textile industry, some insights on the EU policy trends on sustainable textiles, and some tips on how consumers can make more responsible choices and push for change in the fashion sector (see the activity script attached).



## 2. Visitors

The affluence to the Festival was notoriously higher this year than in 2022. This year's edition benefitted from a longer organization time, which resulted in a much more streamlined and well-functioning event, and from better publicity beforehand. The concentration of all Festival activities in the Parc du Cinquantaire also contributed to this success, as did the setting of the Fair, in the Museum of Art and History located at the aforementioned park.

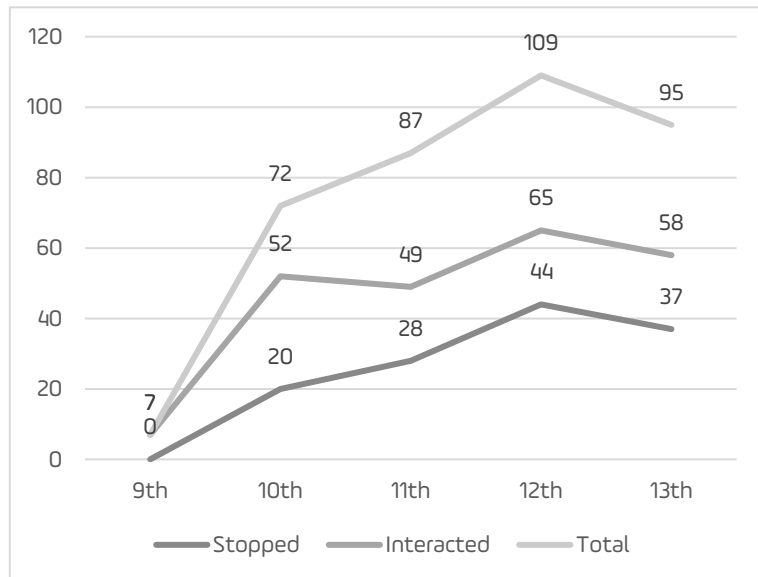
The official opening of the Festival took place on the afternoon of the 8<sup>th</sup> of April. Before the Opening Ceremony, the Fair received an official visit from the European Commission and the Belgian Government/ the Belgian Presidency of the Council of the European Union. Only a small number of booths were flagged by the organizers as stops during this official visit, and luckily one of these was the EuroWeb booth.

We were therefore very honoured to receive a visit of the President of the European Commission, Ursula von der Leyen, accompanied by the Commissioner for Cohesion and Reforms, Elisa Ferreira (PT), and the Commissioner for Innovation, Research, Culture, Education and Youth, Iliana Ivanova (BG), as well as by the Belgian Prime Minister, Alexander de Croo, and the Belgian State Secretary for Economic Recovery and Strategic Investments, in charge of Science Policy, Thomas Dermine. We had the opportunity to briefly explain the Action to them, and the vision we were showcasing of harnessing the knowledge on Textile Heritage as an inspiration for the future.





Starting on the 10<sup>th</sup>, the Fair was open to the public daily between 9:30 and 18:00. Throughout the four full days of the event, the EuroWeb booth received a total of 370 visitors, a very large proportion of which interacted with the Action representatives and asked to learn more about EuroWeb, about the display, and about our message (see. Graph 1).



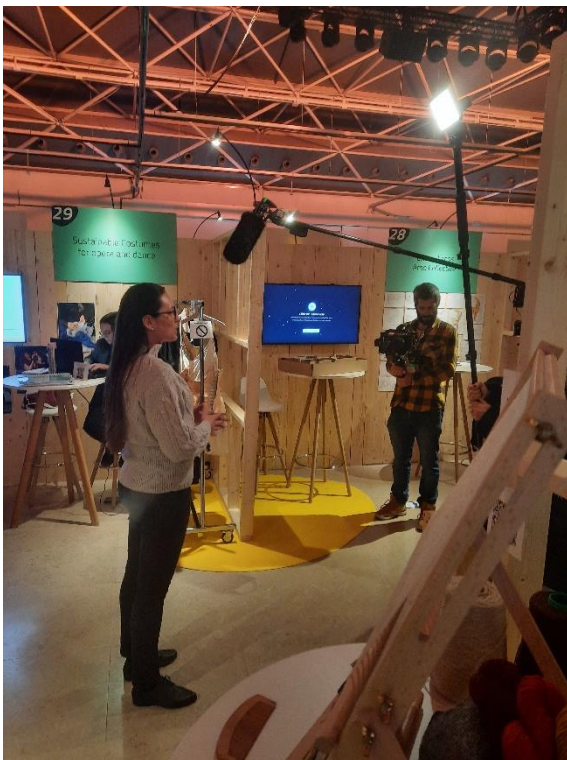
### 3. Social Media coverage and interaction

This year, the organisation of the Festival/ the Fair seems to have flagged EuroWeb and our booth as of particular interest, which meant that the Action's representation at the Festival received significant attention from their partners. The booth was regularly featured in the image galleries produced by the Festival photographers, and we were asked to provide short video content for the Social Media accounts of the New European Bauhaus, the European Commission, and the Science, Research & Innovation services of the European Commission. We were also showcased in the content produced by influencers the Festival was working with to promote the event (e.g., Girl Go Green [Instagram]; Thinking Threads [Instagram; affiliated with Fashion Revolution Belgium]).

The EuroWeb lab activity happened to coincide with the presence on the site of a Portuguese team who was shooting material for an eight-part documentary on the impact of technology in building a more sustainable and inclusive future. They became very interested in the presentation and shot material during the hands-on activity for their documentary. Later they visited the booth and requested interviews with the EuroWeb representatives on the work of the Action, on the pathways to the sustainability of the textile and fashion industry, and on the impact of technology in EuroWeb's work. These were recorded on site the following day. We are currently awaiting further contact with details on the series when it is finalised.

Several other accredited press members stopped by the booth during the four days of the Festival to chat, and took notes on EuroWeb, its work, and our message at this event. Hopefully, this means the Action will get mentioned in reports on the Festival coming up in the next days.

We also came into contact with a significant number of exhibitors working on textiles from different perspectives (e.g., textile engineering, new fibre development, looking at applications in construction, for insulation, etc.), and exchanged details for future contacts. Many visitors also had a connection with the Textile and Fashion Sector, and expressed their interest in contacting in the future to ask for presentations on EuroWeb for their partners or to explore possible avenues for collaboration.



Francisco B. Gomes (Science Communication Coordinator)

Lisbon, 15/04/2024



## ANNEX 1: SCRIPT OF THE LAB ACTIVITY

### Natural Fibres and Dyes: Exploring Traditional Materials for a More Sustainable Fashion Industry

#### 1. Introducing EuroWeb

#### 2. The environmental impact of the Textile and Fashion Industry: some facts and figures

- Major economic activity:
  - Textile Exchange estimates → 109 million tons of textiles produced in 2020, expected to grow to 145 million tons in 2030;
  - EURATEX estimates → €170 billion in turnover in 2023;
  - Major job creator → according to EURATEX, c. 1,3 million people employed across Europe, 70% of which women;
- Major environmental impact:
  - 4<sup>th</sup> most contaminant economic sector in the EU (only behind food, housing, and mobility);
  - Overconsumption of water and natural resources – textile sector the third largest responsible for water degradation and land use – 2700l of water are required to produce a cotton t-shirt – with current textile consumption, each EU citizen uses up 9m<sup>3</sup> of water, 400m<sup>2</sup> of land, and almost 400kg of resources;
  - Water pollution – the textile sector is responsible for 20% of all water contamination globally – 35% of primary microplastics released to the environment each year (0,5 tons) result from the washing of synthetic fibres;
  - Greenhouse gas emissions – fashion industry is responsible for 10% of emissions – with current consumption rates, 270kg of CO<sub>2</sub> per person from textile consumption in the EU;
  - Waste production – only 1% of clothes are recycled

## 2. Current policy trends: the EU's strategy for sustainable and circular textiles

- 2020 → European Union's Circular Economy Strategy
  - Designing sustainable products
  - Empowering consumers and public buyers
  - Circularity in production processes
  - TEXTILES – identified as one of the *key product value chains*
    - developing ecodesign measures; empowering business and private consumers to choose sustainable textiles and have easy access to re-use and repair services;
    - providing incentives and support to product-as-service models, circular materials and production processes;
    - achieve high levels of separate collection of textile waste by 2025;
    - boosting the sorting, re-use and recycling of textiles, including through innovation, encouraging industrial applications and regulatory measures – extended producer responsibility.
- 2022 → EU Strategy for Sustainable and Circular Textiles
  - a) developing, certifying and monitoring truly sustainable and responsible textile value chains;
  - and b) shifting the consumption paradigm by enforcing principles of durability, reparability, and recyclability.

## 3. Textile Heritage as a repository of knowledge and experiences

- a) a diverse array of natural products (especially fibres and dyestuffs), their development and patterns of exploration in the past;
- b) the techniques employed to optimise their use;
- c) the strategies deployed to manage the impact of agriculture and herding for fibre production along environmentally adaptive lines;



- d) the value of good, responsible and creative artisanship in creating lasting, appealing, and prized textile products and garments;
- e) an array of techniques, tools and skills for mending, re-tailoring, repairing, resizing and repurposing garments and textiles.

## 5. Introduction to Natural Fibres and Dyes: interactive experience

### a. FLAX/ LINEN

- Flax - *Linum usitatissimum* < Pale-flax - *Linum bienne*;
- First evidence of domestication in the Near East (Fertile Crescent) some 10k years ago – first for oil, later for fibre – spreads together with agriculture – appears in Europe 7,5k years ago, in the Neolithic;
- Flax cycle – Pulling > Rippling > Retting > Scutching > Heckling > (Skeining, Swiftling) > Spinning/ Plying > Weaving;

[ENVIRONMENTAL ASSESSMENT – uses fewer resources than other fibres, can be grown in poor agricultural land; fibres have a high rate of Carbon absorption]

### b. HEMP

- Probably domesticated in Central Asia – early attestations of domestic species of *Cannabis sativa* in Japan, c. 10k years ago (Jomon Period), and in China, 7k – 5k years ago (Neolithic Yangshao Culture);
- Other authors suggest a second domestication event in Eastern Europe – however, the first consistent evidence for the use of hemp dates from the Bronze Age (~2<sup>nd</sup> millennium BCE) – associated with the expansion of people from the Eurasian steppes?

[ENVIRONMENTAL ASSESSMENT – Fast growing, does not require much water, energy, pesticide or fertilizers; the plant is good for the soil | Issues with national regulations.]

### c. COTTON?

- Two domestic species in the Old World: *Gossypium herbaceum* and *Gossypium arboreum*;

- Systematic cultivation seems to begin in Southern Asia (the Indus Valley) some 4,3k years ago

[ENVIRONMENTAL ASSESSMENT – very high water consumption, pesticide and insecticide use (10% and 16% of the global total), genetically modified stock; issues with labor rights in producer countries | RECYCLED COTTON – production is still very limited.]

#### d. SILK

- Silk worm – *Bombyx mori* → first domesticated in China – earliest available evidence dates back 5,5k years ago, during the Neolithic period – by the 2<sup>nd</sup> millennium BC (c. 3,75k years ago), China had already developed a fully fledged sericulture industry.

[Considered a renewable resource, and biodegradable – organic silk is better, as it excludes the use of chemicals in production; issue of animal rights – types of silk that do not require the animal to die.]

#### e. WOOL

- *Ovis aries* < *Ovis orientalis* (mouflon) – domesticated in the second half of the 9<sup>th</sup> millennium BCE (10,5k years ago) in the Near East (Fertile Crescent) – for meat, and only later for milk and wool;
- Selection of animals led to development of wooly variants – wool first becomes an important resource in the 4<sup>th</sup> millennium BCE (c. 5,5k years ago);
- From the Near East, the use of wool spreads to the Mediterranean (except Egypt) and to Europe, triggering what has been dubbed a true “Textile Revolution”.

[ENVIRONMENTAL ASSESSMENT – issues of land usage and overgrazing; methane production contributes to greenhouse effect; use of chemicals, namely insecticides, in herding; issues with animal welfare | RESPONSIBLE WOOL – organic (v. Responsible Wool Standard, GOTS)]



## 6. Experiencing traditional textile production: the wool cycle

- Raw wool (\*plucking, \*shearing)
- Fibre preparation (\*handcarding, \*carding, \*combing)
- Thread making (\*spinning, \*dubbing)
- Fabric making (\*weaving)
- Fabric finishing (\*dyeing; \*fulling)
- Felting

## 7. Some notes on natural dyes (?)

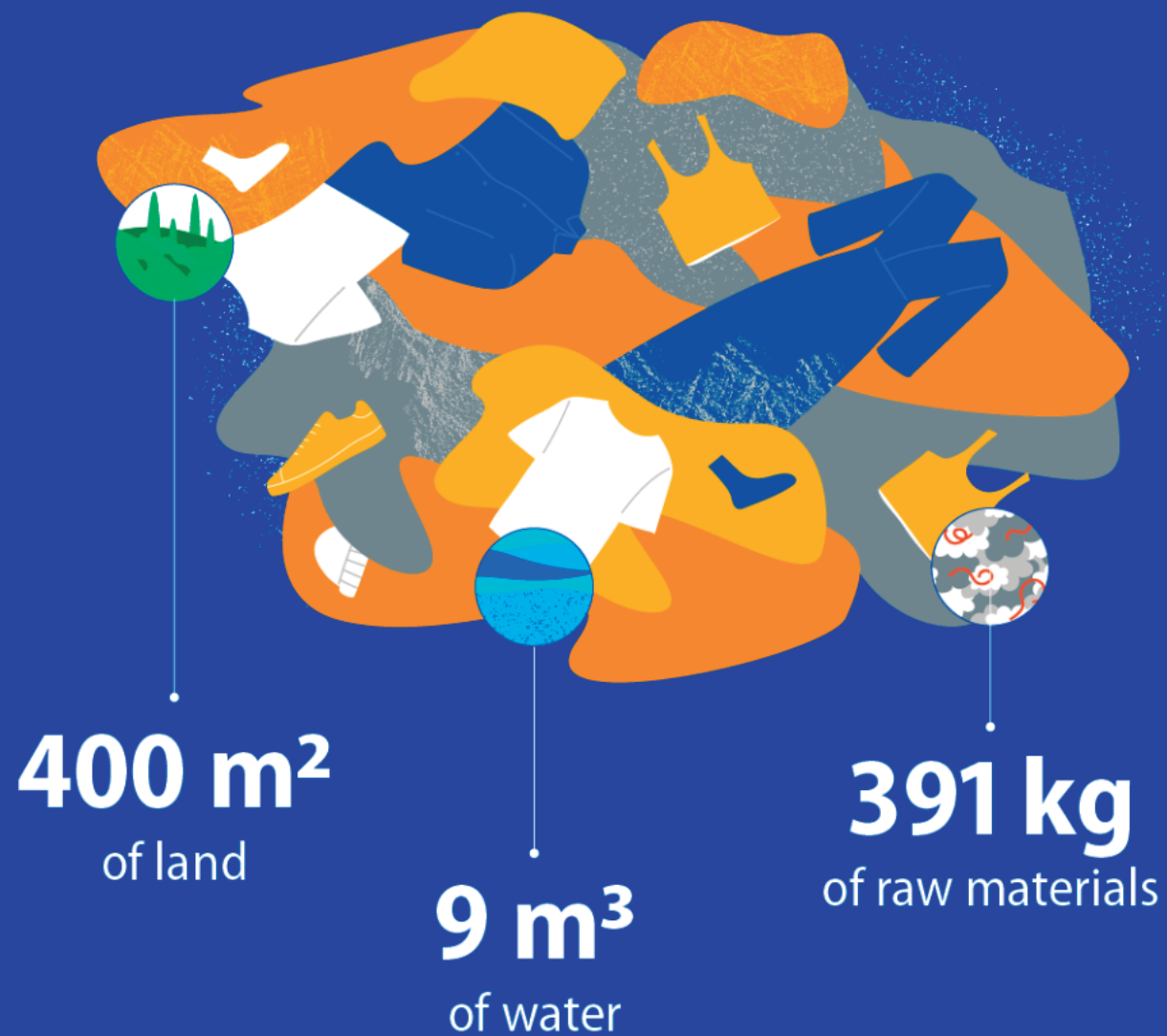
## 8. What can consumers do to push for change?

- **Slow Fashion** – less garments, better quality, durable, more uses – trusted supply-chains, small-scale production, traditional textile techniques... → pay attention to **labelling** – look for materials with less of an environmental impact and particularly for **standards certification** (OEKO-TEX, GOTS, Organic Content Standard, Recycled Claim Standard/ Global Recycled Standard; Responsible Wool Standard, EU Ecolabel...);
- Support up-and-coming '**fashion as a service**' and '**instant fashion**' business models;
- As it is pushed by the EU, support businesses and brands that are early adopters of **Extended Producer Responsibility** schemes;
- Explore **circular fashion** (e.g., through the purchase of used and vintage clothing, by learning about upcycling techniques, etc.);
- **Dispose of textiles carefully** to help insure (as far as the infrastructure currently allows) their re-use, repair, and upcycling;
- **Pay attention to labels** (which are in the process of being improved by current EU initiatives) and follow instruction when laundering to prolong the life of garments and reduce textile waste.

## ANNEX 2: VISUAL AIDS FOR THE LAB ACTIVITY

# THE ENVIRONMENTAL IMPACT OF TEXTILES

In 2020 textile consumption  
per person in the EU required on average:



And caused a carbon  
footprint of about **270 kg**

Source: European Environment Agency (2023)



# TEXTILE PRODUCTION

Global textile fibre  
production has  
almost doubled:



from  
**58 million tonnes**  
in 2000

to  
**109 million tonnes**  
in 2020

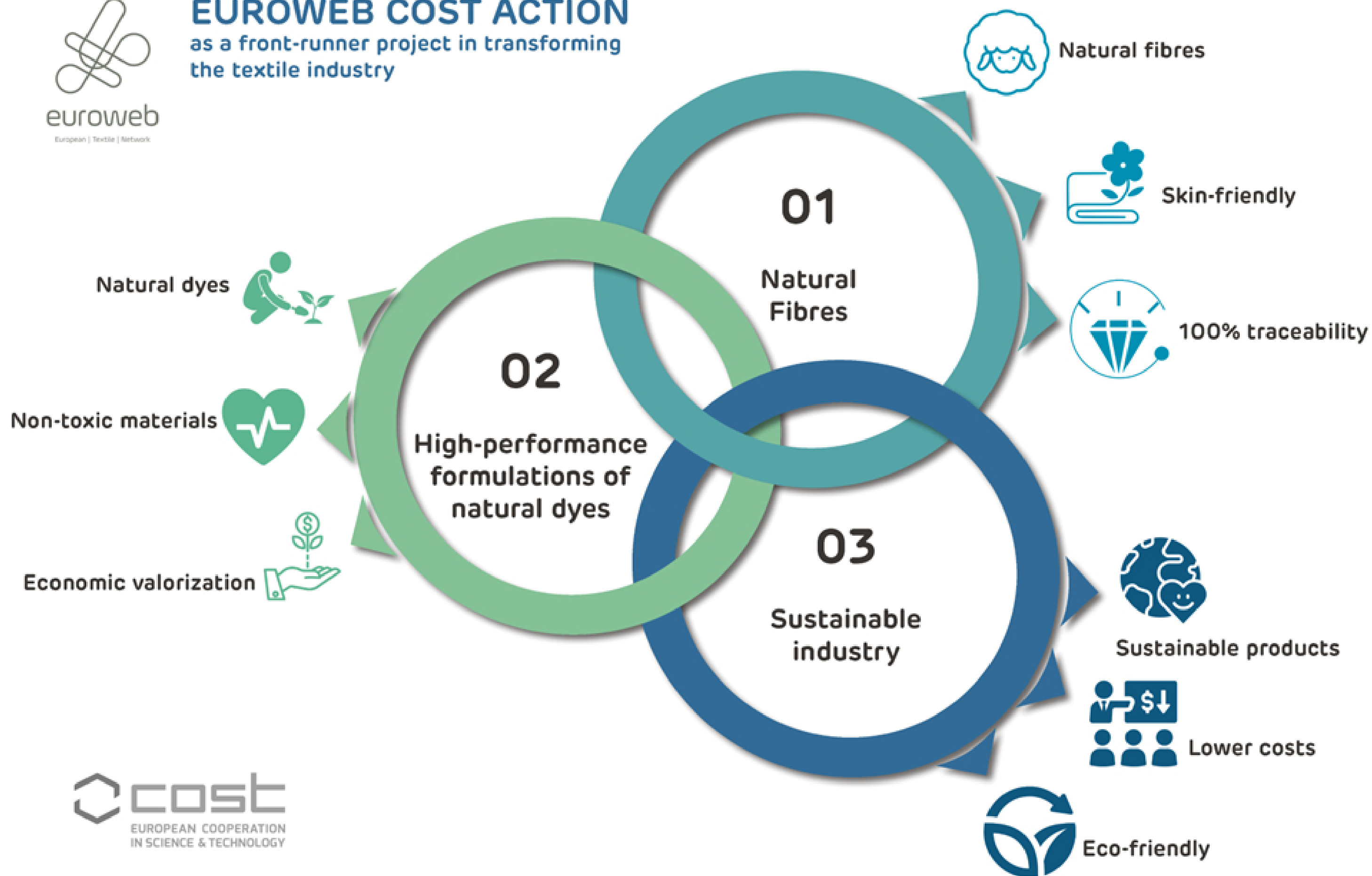
and is projected to grow to  
**145 million tonnes**  
by 2030

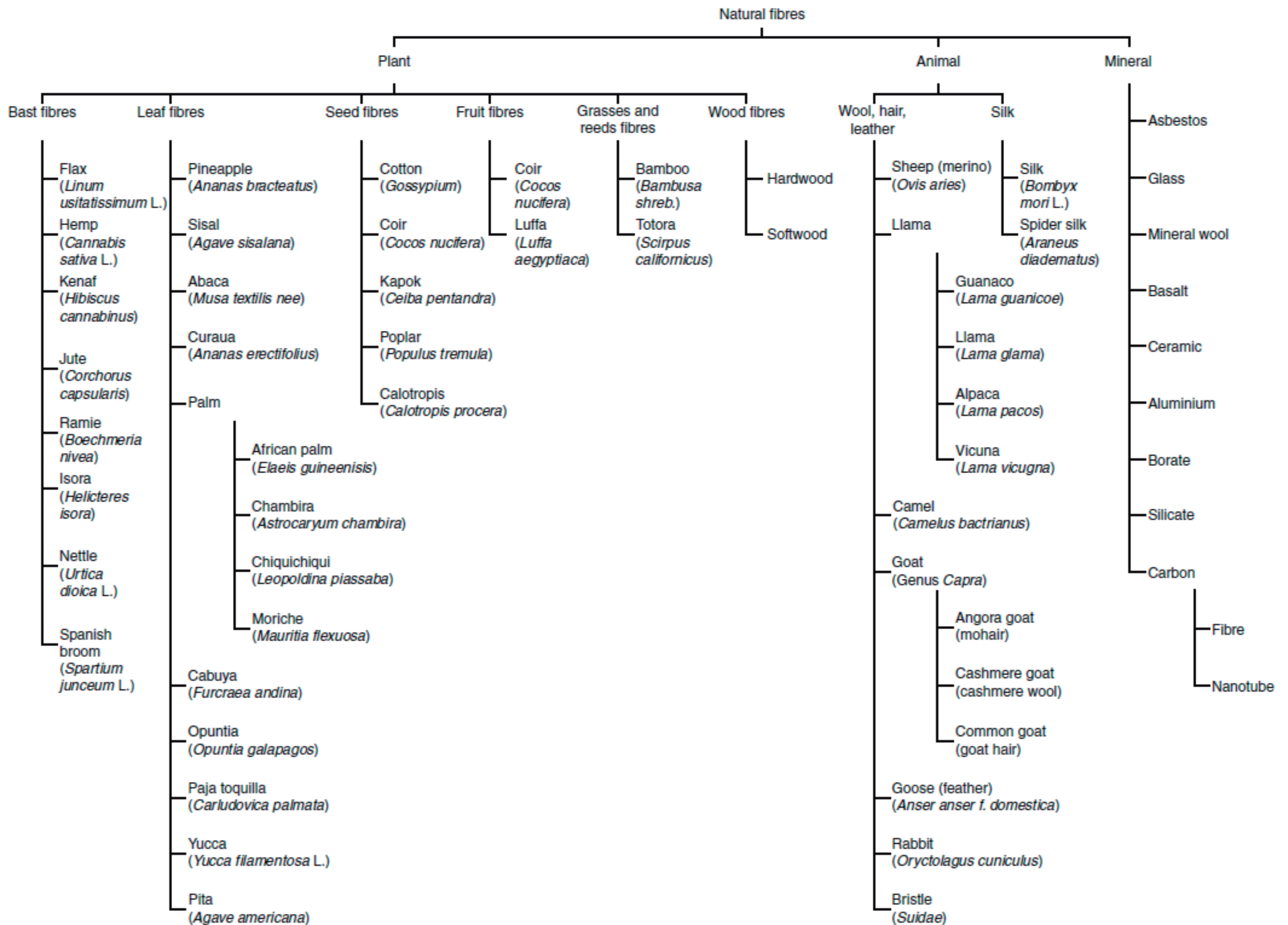
Source: European Environment Agency (ETC-CE Report 2023/5)



# EUROWEB COST ACTION

as a front-runner project in transforming  
the textile industry







# The Fibers We Like

The FIBERS WE LIKE are “eco-friendly” fibers, which means that their production process has a low impact on the environment and **meets at least half of the below criteria**:



RECYCLED FIBERS	PLANT-BASED FIBERS	ANIMAL-BASED FIBERS	SEMI-SYNTHETIC
made with waste material	with low environmental impact	produced in sustainable way	with low environmental impact
RECYCLED POLYESTER	ORGANIC COTTON	ALPACA	LYOCELL/TENCEL®
RECYCLED NYLON	LINEN	SILK	ORANGE FIBER
RECYCLED COTTON	HEMP	RESPONSIBLE WOOL	PINEAPPLE FIBER
RECYCLED WOOL	RAMIE	RESPONSIBLE CASHMERE	SUSTAINABLE VISCOSE
RECYCLED TEXTILE	NATURAL RUBBER	RESPONSIBLE LEATHER	CUPRO
		RESPONSABLE DOWN	

# The Fibers We Avoid

The FIBERS WE AVOID have **one or several** of the below **notably negative environmental impact**. We consider these impacts serious enough to try to discard these fibers from our wardrobe:

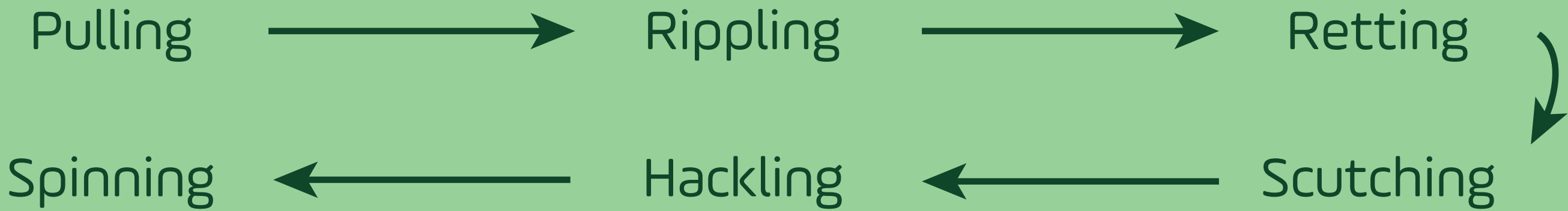


NATURAL & ANIMAL-BASED FIBERS	SYNTHETIC & SEMI-SYNTHETIC FIBERS
COTTON	POLYESTER
WOOL	SYNTHETIC FIBERS
DOWN	RAYON, VISCOSE, MODAL
LEATHER	BAMBOO
CASHMERE	VEGAN LEATHER



# Flax Harvest and Treatment in Corredoura (Minho, PT)

(Folklore Group of Corredoura. Source: [saberfazer.org](http://saberfazer.org))





Raça  
0000

Total

■ Rara

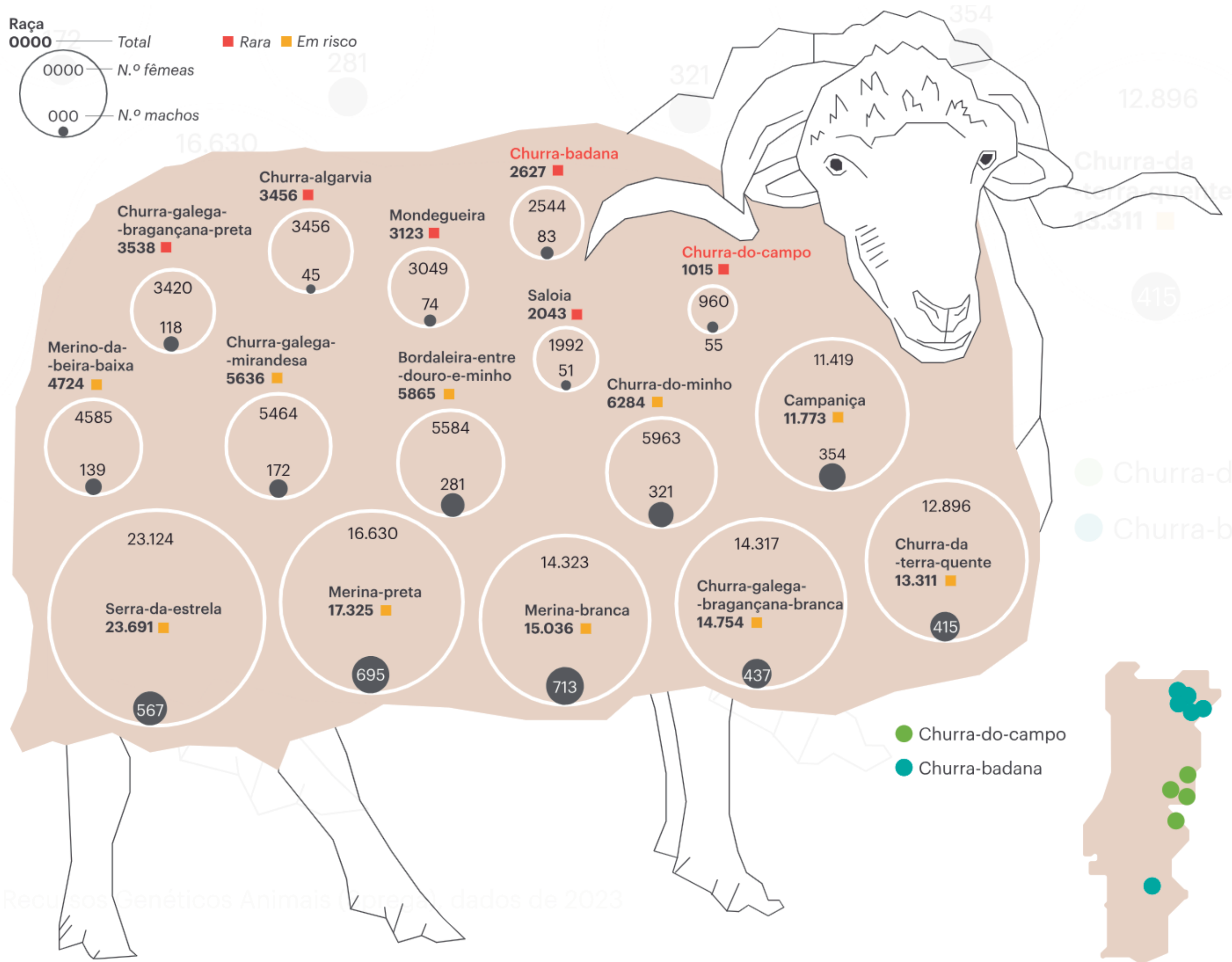
■ Em risco

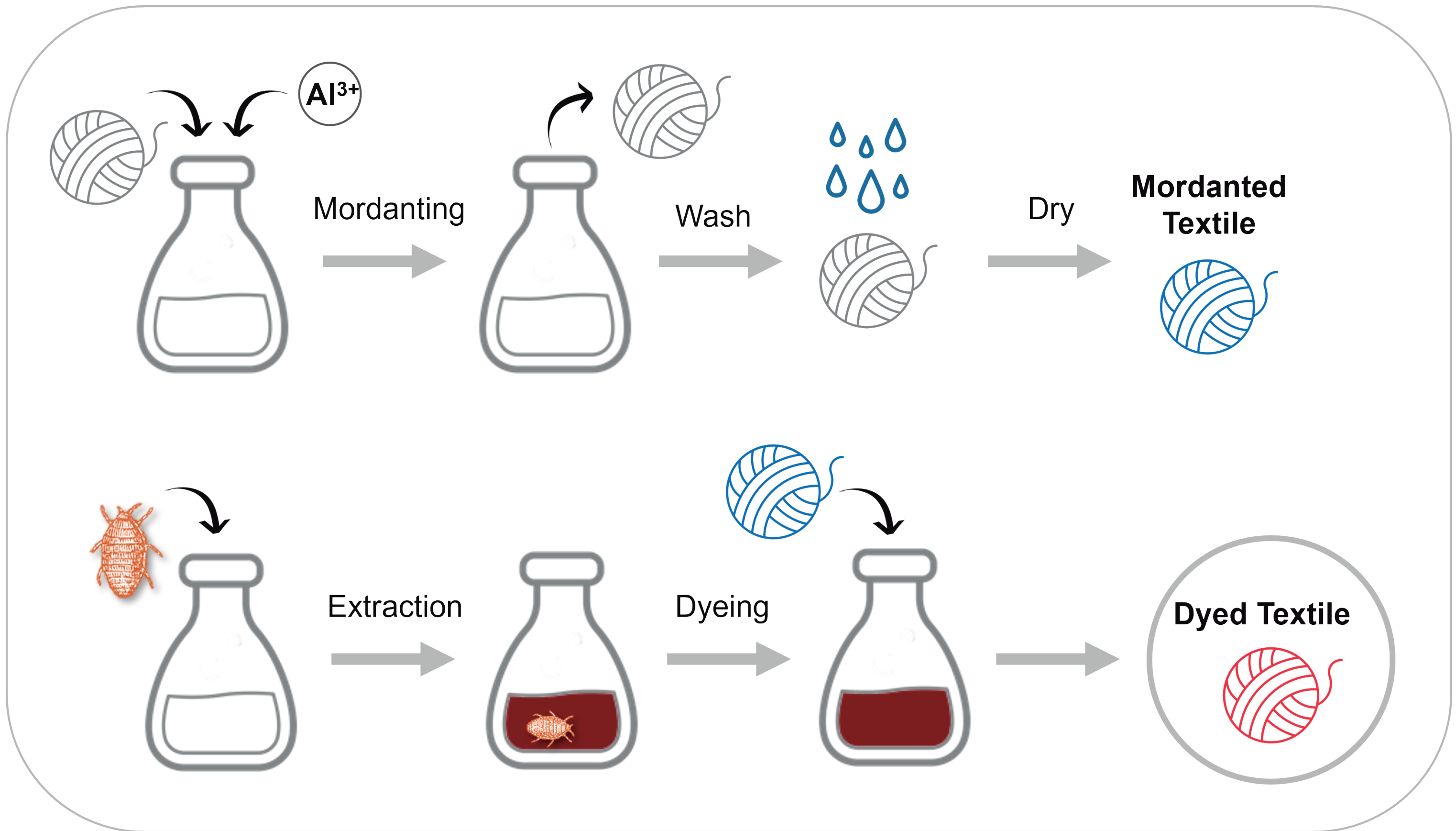
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N.º fêmeas

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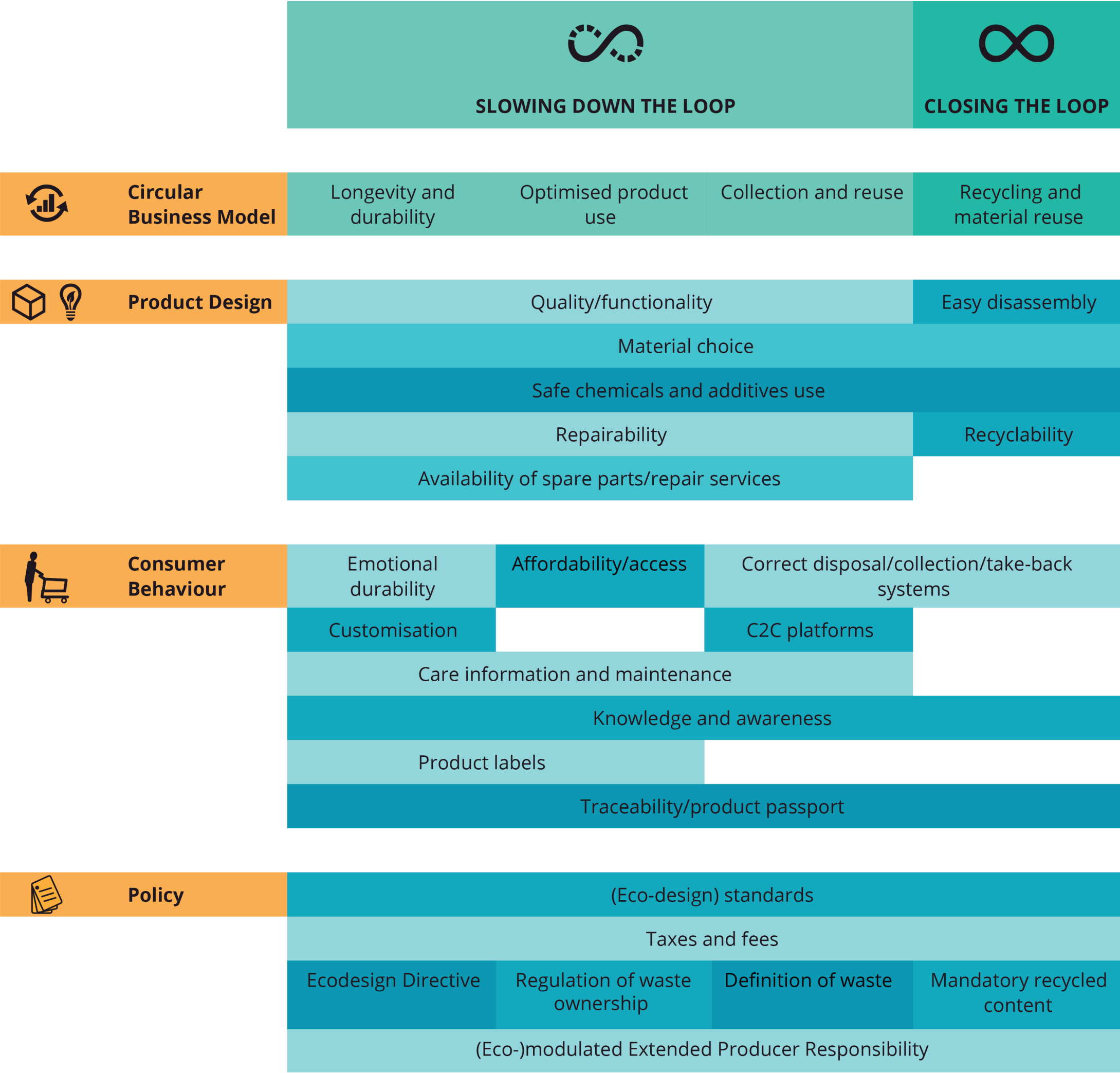
N.º machos





Source: J. Kirby, M. van Bommel, A. Verhecken (2014) - Natural colorants for dyeing and lake pigments: practical recipes and their historical sources. London: Archetype Publications; 2014. Kindly provided by P. Nabais.

# Linkages between the circular business model, product design, consumer behaviour, and policy



**Source:** European Environmental Agency, ‘Textiles and the environment: the role of design in Europe’s circular economy’.