

DELIVERABLE I

RECYCLING INDUSTRY PANORAMA TO 2028

EUROPEAN MAPPING OF TEXTILE RECYCLING
STAKEHOLDERS - **FIRST VERSION**

Working group : Future sorting processes

Last update - June 2025

English version

B.A.L.I. CHAIR

The BALI (Biarritz Active Lifestyle Industry) Chair is a teaching and research program on technological innovations applied to textiles to enable concrete circularity. The Chair's work is based on 3 areas of reflection:

- **Circular fashion** - Reinventing material and garment manufacturing models to meet the new regulatory constraints of the law against waste and for the circular economy.
- **Agile, reasoned and close-knit fashion** - Produce differently, on demand, locally and automatically, to develop Made in France.
- **Transparent fashion** - Controlling the textile supply chain from A to Z to better inform an informed and committed consumer.

CETIA
FROM GOODS TO MATERIALS

 **DECATHLON**

 **e-SCM**
édité par BELHARRA SAS

ESMOD

ESTIA
INSTITUTE OF TECHNOLOGY

GEBETEX
part of Boer Group

GROUPE ERAM

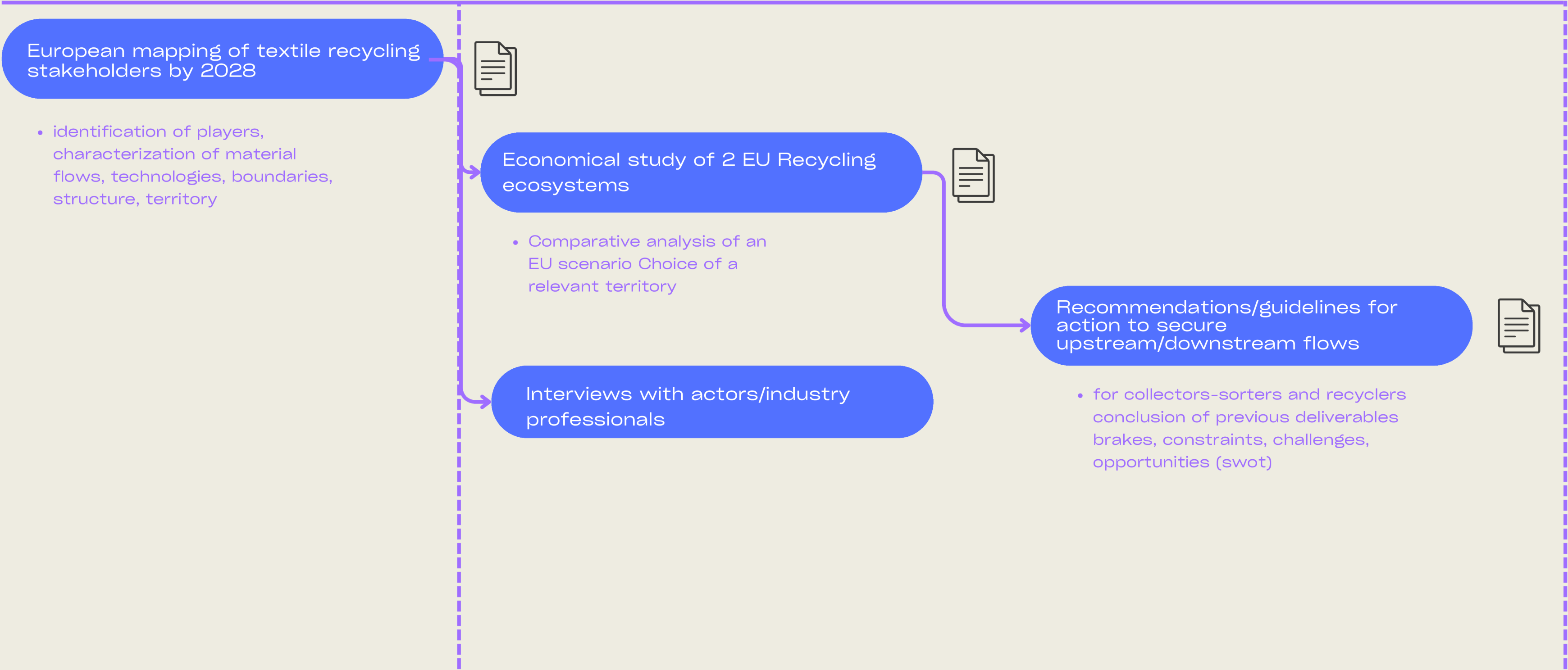


To carry out its work, the members of the Chair have committed themselves through theses and extended working groups. Roxane Couffitte, a research engineer at the Chair, and Marilou Hargoues, a textile engineer at CETIA, are working on the TLC recycling chain.

PLANNING 2025

july 2025

oct 2025



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GLOSSARY

Automated sorting : The use of machines and technology to identify, classify, and separate different types of textiles (cotton, polyester, wool) in an automated way, typically in the context of textile recycling, waste management, or second-hand clothing sorting.

Chemical recycling : Processes that break down textile waste into its basic chemical building blocks (monomers or oligomers) or into other valuable chemicals. These building blocks can then be used to create new virgin-quality materials, including new textiles

Closed-loop recycling (Textile-to-textile ; F2F): Any recycling operation enabling the reuse of recycled fibres from textile waste in the production of new textile.

Defibering : Defibering is the process of removing fiber from a material.

De-trimming : Process of dismantling garments to remove hard points (buttons, rivets, zips, patches, etc..).

Fraying/shredding : Process of fraying or thinning the edges of a fabric, often for aesthetic purposes or to create softer.

Mechanical recycling : Processes that convert textile waste into new materials without significantly altering the chemical structure of the fibers. These processes typically involve sorting, shredding, and processing the textile waste into fibers that can then be spun into new yarns or used in non-woven applications.

Open-loop recycling: Any recycling operation enabling the reuse of recycled fibres from textile waste in the production of new products, other than textile.

Preprocessing : Any operation that prepares a material for recycling, including delissage, defibration, chipping, etc.

DISCLAIMER

The purpose of this deliverable is to present a non-exhaustive mapping of the major players in the European Recycling sector.

These results are essentially based on bibliographical research, website and declarative company data or press release.

As a result, there may be uncertainties regarding players, capacity or equipment.

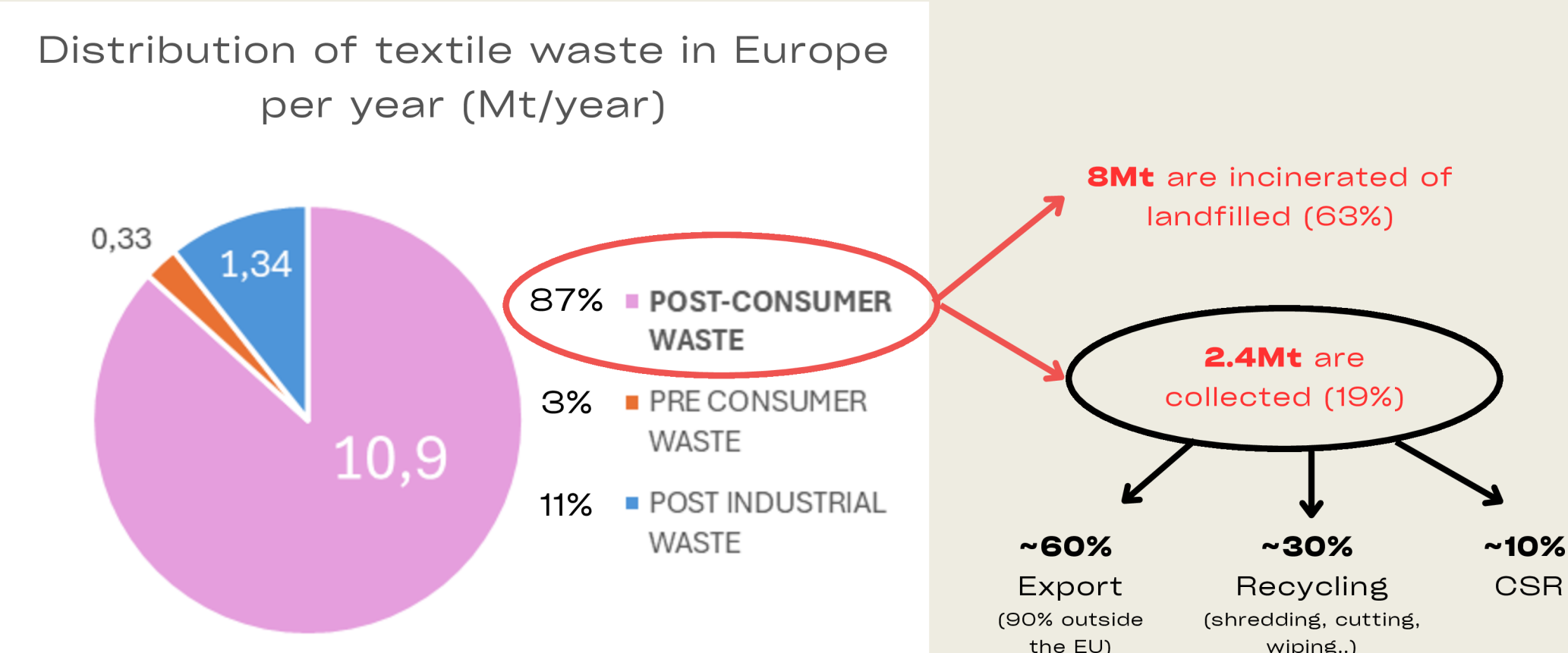
If you feel that any players or information is missing, please do not hesitate to write to us or fill in [the form](#) at the end of this document.

Study parameters :

- The **fiber recycler study** focused exclusively on cotton, polycotton and polyester fibers
- The latest research was updated in March and June 2025
- With regard to pre-processors, we have only listed those with annual capacities of at least 4,000 tonnes.

KEY FIGURES: TEXTILE WASTE IN EUROPE

Europe generates 12.6Mt of textile waste per year*



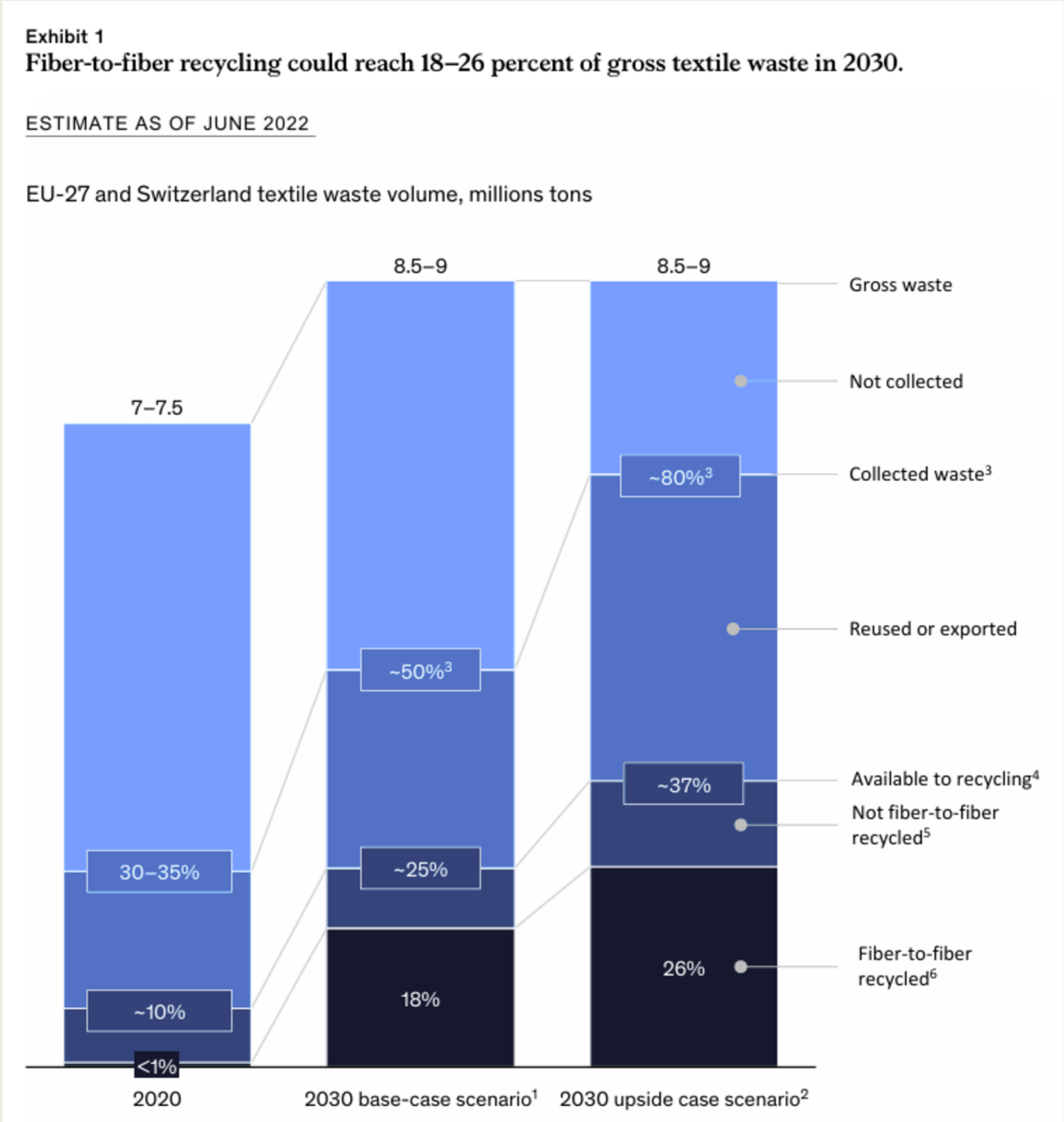
Based on 2019 year reference* (JRC) :

- Estimated sorting capacity in the EU : **1.8 Mt/y**
- Estimated recycling capacity in the EU : **0.70-0.85 Mt/y**
- Estimated recycling capacity in the EU in 2030/2035 : **1.5-2.0 Mt/y**

*Techno-scientific assessment of the management options for used and waste textiles in the European Union, JRC, 2023

**Scaling textile recycling in Europe-turning waste value, McKinsey & Company, 2022

McKinsey estimation**, scenarios for 2030 :



RECYCLING INDUSTRY, HOW IT WORKS ?

CONSUMER



Consumers or companies deposit their products in public and/or private bins, and the collection of these garments can be carried out by other actors and sources.

- Textile bins
- Product take back
- Donated garments
- Excess stock / unsold

COLLECTING, PRE-SORTING & SORTING



Collecting the post-consumer goods (garments and shoes) and sort manually or automatically them by quality, color, typology etc.

PRE-PROCESSING



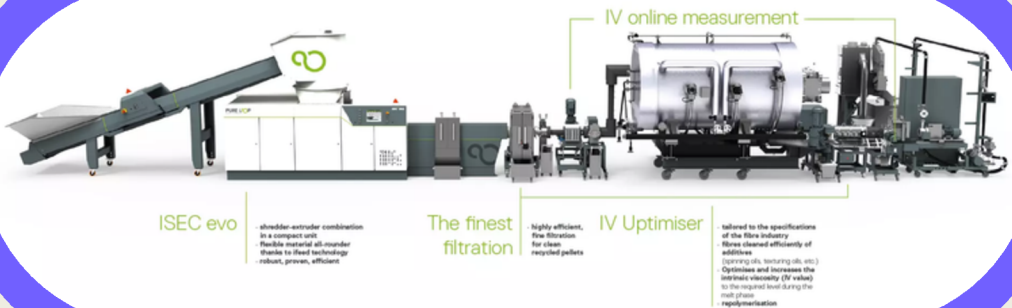
Any operation that prepares a material for recycling, including delivage, defibration, chipping, etc.

OUTPUTS

FIBER STAPLE

CELLULOSIC POWDER

YARN (OPEN END)

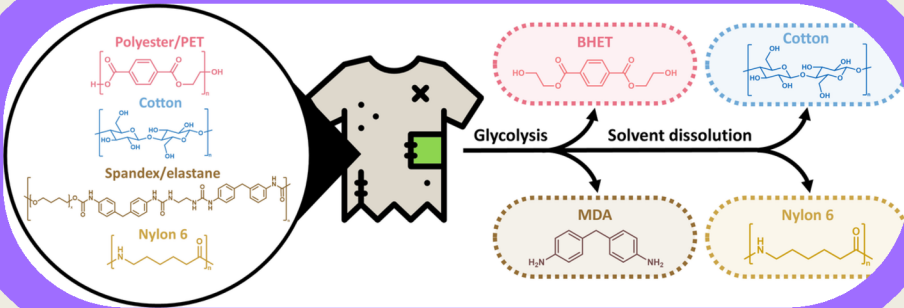


MECHANICAL RECYLING

Processes that transform textile waste into new materials while preserving the fibers' chemical structure involve sorting, shredding, and reprocessing the waste into fibers suitable for new yarns or non-woven applications.

OUTPUTS

FIBER TO FIBER



CHEMICAL RECYLING

Processes that break down textile waste into its basic chemical building blocks (monomers or oligomers) or into other valuable chemicals. These building blocks can then be used to create new virgin-quality materials, including new textiles

MAPPING OF EU COLLECTORS-SORTERS TO 2030

01



- Collector-sorters Emmaus & Le Relais network (non-exhaustive)
- Collectors-sorters
- Collectors-sorters + pre-processors

- [50 000; 100 000 t]
- [25 000; 50 000 t]
- [5 000; 25 000 t]
- < 5000 t



DISCLAIMER : Non-exhaustive list, data based on company website and press releases found online

| Collectors / Sorters | Collection area | Structure | Sourcing | Current annual capacity (Tons/year) | Type of sorting |
|-------------------------|---------------------|-----------------------|---|-------------------------------------|--|
| Emmaus / Le Relais | France | SSE* | Public bins (+ de 20 000 box), donations, door-to-door collection | 140 000 | Manual sorting |
| Curitas | Belgium | SSE | Public bins, donations | 10 000 | Automated and manual sorting <small>(Group Boer member, provides Frankenhuis)</small> |
| Insertega | Spain | SSE | Unknown | Unknown | Pellenc ST |
| Koopera | Spain | SSE | 700 collection points | 6 000 | Automated sorting (Fibersort) |
| Soex Group | Italy, Spain | Private | Public bins, donations, municipal bins | 100 000 | Automated sorting |
| Gebetex | France | Private | Public and private bins | 4 000 | Manual sorting |
| Texaid | Europe | Private | Municipal bins, shop collection | 40 000 | Manual sorting |
| VIVE Textile recycling | Poland | Private | Unknown | 60 000 | Manual sorting |
| Textile House | Europe | Private | Unknown | 20 000 Target to 60 000 in 2030 | Manual sorting |
| Nathan's Wastesavers | Scotland | Private | Municipal and public bins, charity shop | 30 000 | Manual sorting |
| JMP Wilcox | UK | Private | Municipal and public bins, charity shop | 45 000 | Manual sorting |
| Coleo | Spain (France soon) | Private | Public bins, donations, charity shop | 20 000 | Automated sorting (Picvisa) |
| Sympany | Netherlands | NGO | Public bins, municipal bins | 23 000 | Manual sorting |
| Humana People to People | Italy, Spain | NGO | Public bins, donations, municipal bins | 18 000 | Manual sorting |
| The Salvation Army | United Kingdom | Charity-owned company | Public bins, donations, charity shop | 67 000 | Automated sorting Fibersort (VALVAN) |

*Companies on standby and/or closing down

*SSE : Social and solidarity economy (Economie sociale et solidaire)

MAPPING OF EU PRE-PROCESSORS TO 2030

2022



MAPPING OF EU PRE-PROCESSORS TO 2030

**ESTIMATED TOTAL CAPACITY
= AROUND 230 000 TONS/YEAR**

***COMPANIES ON STANDBY
AND/OR CLOSING DOWN**



Pre-processors



Collectors-sorters + pre-processors



[50 000; 100 000 t]



[25 000; 50 000 t]



[5 000; 25 000 t]



< 5000 t



DISCLAIMER : Non-exhaustive list of preprocessors, data based on company website and press releases found online

| Entity name | Country, city | Current annual capacity (Tons/year) | Manual sorting | Automatic sorting (composition & colors) | Manual de-trimming | Automated de-trimming | Fraying/ shredding | Comments / Type of finished products |
|-----------------------------|-------------------------------|-------------------------------------|---|---|--------------------|------------------------------|-----------------------|---|
| Altex Textile Recycling | Allemagne, Gronau (Westfalen) | 30 000 | / | / | / | / | yes | Ready-to-recycle fibers ; Non-wovens, building insulation (10 000t/y) |
| Buitex | France, Cours La Ville | 5 000 | / | / | / | / | ANDRITZ | Non-wovens, building insulation |
| Texcelis | France, Hermival-les-Vaux | Unknown | / | / | / | / | yes | Ready-to-recycle fibers ; Non-woven, felt |
| Essaimons | France, Châtellerault | 12 000 | / | Ecosort (PICVISA) | yes | / | / | Sorted and prepared textiles ; Subsidiary of PLAXTIL |
| Circle-8 | UK | 25 000 Plan for 2030 | / | NEWRETEX | / | yes ? | yes ? | Ready-to-recycle fibers ; Partner in the ACT UK project |
| Nouvelle Fibres Textiles | France, Amplepuis | 100 000 Plan for 2030 | / | PELLENC | / | ANDRITZ | / | Ready-to-recycle fibers |
| Amarande | France, Lussac-Les-Chateaux | Unknown | / | / | / | / | yes | Non-wovens, insulation |
| Delorge (Textile recycling) | Belgium, Wevelgem | Unknown | / | / | / | / | yes | Ready-to-recycle fibers |
| Dagobaire | France, Toufflers | 4 500 | With MATOHA hand-held sensors | / | / | / | yes | Ready-to-recycle fibers |
| Wieland Textiles | Netherlands | 9 000 | yes | Fibersort (VALVAN) | / | / | / | Sorted textiles |
| Looper Textile | Germany | 8 t/day | yes, NIR sensors (company-owned technology) | | / | / | / | Sorted textiles |
| Sysav (Siptex) | Sweden, Malmö | 24 000 | / | TOMRA | / | / | / | Sorted textiles |
| Igers | Italy, Novare | 25 000 | / | TOMRA | / | DELL'ORCO | / | Ready-to-recycle fibers |
| Dremeco | Poland, Varsovi | Unknown | / | / | / | / | DELL'ORCO | Non-wovens, insulation |
| Texcycle | Bulgarie, Varna | Unknown | / | / | / | / | yes ? | Subsidiary of Eurotex |
| Reciclados Tanger | Maroco, Tanger | 1.5 t/day | yes ? | / | / | / | MARGASA | Ready-to-recycle fibers |
| LSJH | Finlande, Turku | Unknown | yes ? | / | / | / | yes | Ready-to-recycle fibers |
| CETIA | France, Hendaye | demonstrator (200kg/h) | / | Fibersort (VALVAN) | / | Cleaning Willow (DELL'ORCO) | / | Ready-to-recycle fibers |



MAPPING OF EU COLLECTORS & PRE-PROCESSORS TO 2030





03





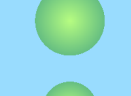
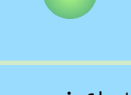
MAPPING OF EU COLLECTORS & PRE-PROCESSORS TO 2030

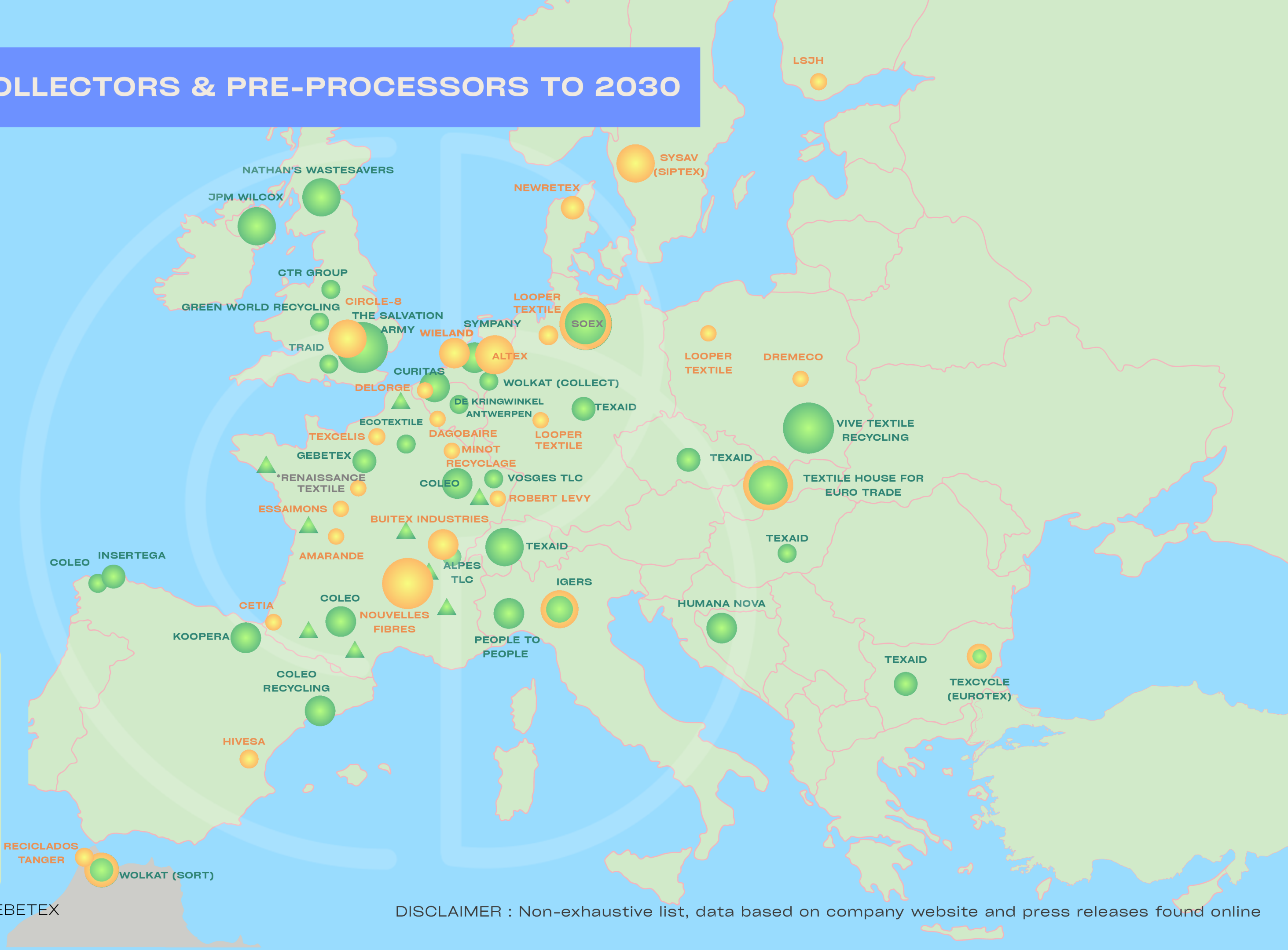
**ESTIMATED TOTAL CAPACITY
= AROUND 850 000 TONS/YEAR**

***COMPANIES ON STANDBY
AND/OR CLOSING DOWN**

-  Collector-sorters Emmaus & Le Relais network (non-exhaustive)
-  Collectors-sorters
-  Pre-processors
-  Collectors-sorters + pre-processors

ANNUAL CAPACITY

-  [50 000; 100 000 t]
-  [25 000; 50 000 t]
-  [5 000; 25 000 t]
-  < 5000 t



MAPPING OF CHEMICAL RECYCLERS TO 2030

04



MAPPING OF CHEMICAL RECYCLERS TO 2030

ESTIMATED TOTAL CAPACITY
= AROUND 475 000 TONS/YEAR

What proportion will be allowed for
post-consumer textiles ?

FIBER INPUT



Cotton



Polyester



Polycotton

ANNUAL CAPACITY (Tons/year)



100 000



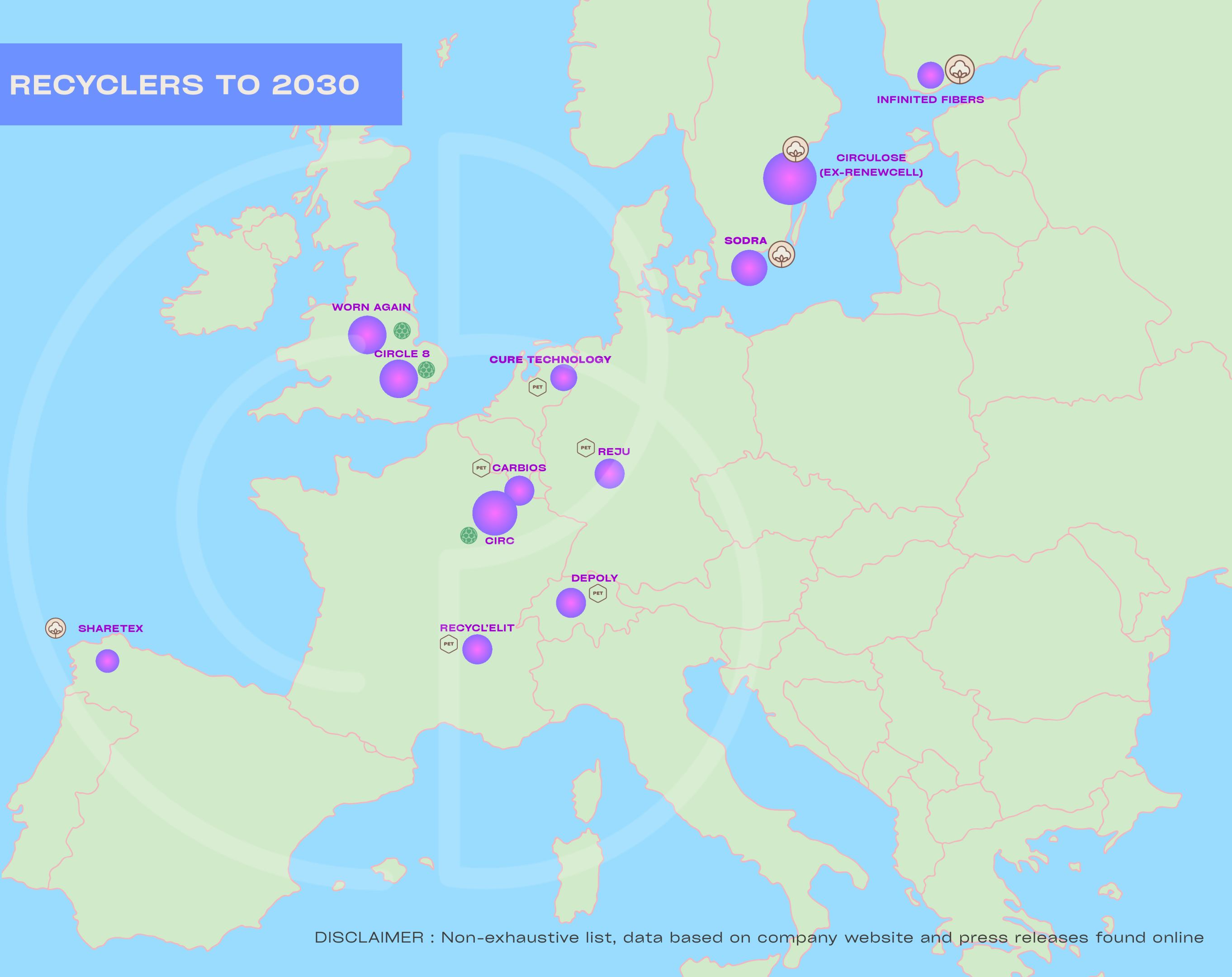
[50 000 - 70 000]



[25 000 - 30 000]



< 5 000



DISCLAIMER : Non-exhaustive list of chemical recyclers, data based on company website and press releases found online

| Entity name | Country, city | Input | Process | Current capacity | Annual capacity by 2030 (Tons/year) |
|--------------------------|------------------------------------|------------|--|--|---|
| CARBIOS | France, Longlaville | PET | Depolymerization by enzymatic hydrolysis | 1000 t/y Pilot scale, in Clermont-Ferrand | 25 000 Longlaville plant under construction (total capacity : 50 000 t/y) |
| CuRe Technology | Netherlands, Emmen | PET | Depolymerization by glycolysis | 20 kg/h Pilot scale | 25 000 Total capacity : Textile proportion ? |
| REJU | Pays-Bas, Chemelot Industrial Park | PET | Selective depolymerization of PET | Demonstrator plant in Frankfurt | 50 000 Netherlands plant under construction |
| RECYCL'ELIT | France, Vénisseux | PET mixed | Selective depolymerization of PET | 100 kg/month Pilot scale | Unknown |
| DePoly | Switzerland, Monthey | PET | Depolymerization | 500 t/y Pilot scale | 25 000 Total capacity : Textile proportion ? |
| CIRC | France, Saint-Avold | Polycoton | Depolymerization by hydrolysis | Pilot scale in the USA | 70 000 Annoucement : plant in Saint-Avold in 2028 |
| CIRCLE-8 | United Kingdom | Polycotton | Utilizes a Worn Again license | In development | 50 000 |
| WORN AGAIN | UK, Nottingham (and Switzerland) | Polycoton | Solvent-based dissolution | 1 000 t/y | 50 000 Target to have 40 plants operating 50k t/y Pilot scale(2028). Total capacity : Textile proportion ? |
| CIRCULOSE (EX-RENEWCELL) | Sweden, Stockholm | Coton | Pulping process (dissolution) | 60 000 t/y | 100 000 |
| INFINITED FIBERS | Finland, Espoo | Coton | Pulping process (dissolution) | operational plant scheduled for 2026 | 30 000 |
| SODRA (with Lenzing) | Sweden, Morrum | Coton | Solvent-based dissolution | Demonstrator plant | 50 000 |
| ShareTex | Sweden, Spain | Coton | Pulping process (dissolution) | Partner with ENCE (pulp cellulose) to built industrial unit pilote at As Pontes. | Unknown |

Output : fiber-to-fiber



MAPPING OF MECHANICAL RECYCLERS TO 2030

05

MAPPING OF MECHANICAL RECYCLERS TO 2030



ESTIMATED TOTAL CAPACITY
= AROUND 1.3 MT/Y

What proportion will be allowed for
post-consumer textiles ?

FIBER INPUT

- Cotton
- Polyester
- Polycotton
- All fibers

CLOSED LOOP MECHANICAL RECYCLERS

OPEN LOOP MECHANICAL RECYCLERS

= +

ANNUAL CAPACITY (Tons/year)

- 1 000 000
- [50 000 - 70 000]
- [25 000 - 30 000]
- < 5 000



| Entity name | Country, city | Current capacity | Input | Process and equipment if known |
|------------------------------------|------------------------------|---|----------------------------------|--|
| Filature du Parc | France, Brassac | 500 t/y | Natural fibers | Defibering, spinning |
| Procotex | Europe, Belgium | 25 000 t/y | All fibers | Cutting/Shredding,Fiberising |
| Wolkat Recycling | Maroc, Tanger | Unknown | All fibers | Mechanical recycling |
| Minot Recyclage (Groupe Le Relais) | France, Billy-Berclau | 40 000 t/y | All fibers | Non-wovens, felt for the automotive industry, thermal and acoustic insulation (“Métisse” product) |
| Brightfiber Textile | Netherlands | 2 500 t/y Target to 3 000 t/y in 2030 | All fibers | NIR sorting, Fiberising |
| Frankenhuis B.V. | Netherlands, Almelo | 8 000 t/y Target to 20 000 t/y in 2030 | Cotton, cotton blends | Tearing lines, Fiberising, Grinding, FFIBR spinnable recycled fibers |
| Recover™ | Spain / Vietnam | 65 000 t/y | Cotton, cotton blends | Cutting/Shredding,Fiberising, Blending,Fiberising,Fibre Production,Opening,Recycling,Shredding,Tearing |
| Valerius 360 | Portugal | 2 160 t/y | White Cotton | Cutting, shredding, spinning They invest on chemical recycling too |
| Ouateco | France, St géours de Marenne | 10 000 t/y | Cotton, rich cotton | Dellorco Y Villani Line |
| Sasia | Portugal, Ribeirão | 10 000 t/y | Cotton, natural fibers | Andritz Laroche line |
| RE&UP (Sanko) | Turkey | 80 000 T > Target to 1 000 000 t/y in 2030 | Cotton, polyester and polycotton | Mechanical recycling, ANDRITZ lines |
| Renaissance Textile | France | 3 000 T | Polycotton | Delamination, defibering |
| Rester Oy | Europe / Finland | 6 000 t/y Target to 10 000 t/y in 2030 | Cotton, polyester and polycotton | Cutting, Shredding, Blending, |
| Altex | Deutschland | 10 000 t/y | Cotton, polyester and polycotton | Cutting, shredding,Blenders (Trützschler, Temafa), Separation (Höcker Polytechnik) |
| Purfi | Belgium | 3 000 t/y Target to 25 000 t/y in 2030 | Cotton, polyester and polycotton | "Soft mechanical" technology, patent |

MAPPING OF RECYCLERS BY NATURE OF FIBER TO 2030

06

MAPPING OF POLYESTER RECYCLERS TO 2030



FIBER INPUT

All fibers

Polyester

Polycotton

CLOSED LOOP MECHANICAL RECYCLERS

OPEN LOOP MECHANICAL RECYCLERS

CHEMICAL RECYCLING

ANNUAL CAPACITY (Tons/year)

1 000 000

[50 000 - 70 000]

[25 000 - 30 000]

< 5 000



DISCLAIMER : Non-exhaustive list, data based on company website and press releases found online

MAPPING OF COTTON RECYCLERS TO 2030



FIBER INPUT

All fibers

Cotton

Polycotton

CLOSED LOOP MECHANICAL RECYCLERS

OPEN LOOP MECHANICAL RECYCLERS

= +

CHEMICAL RECYCLING

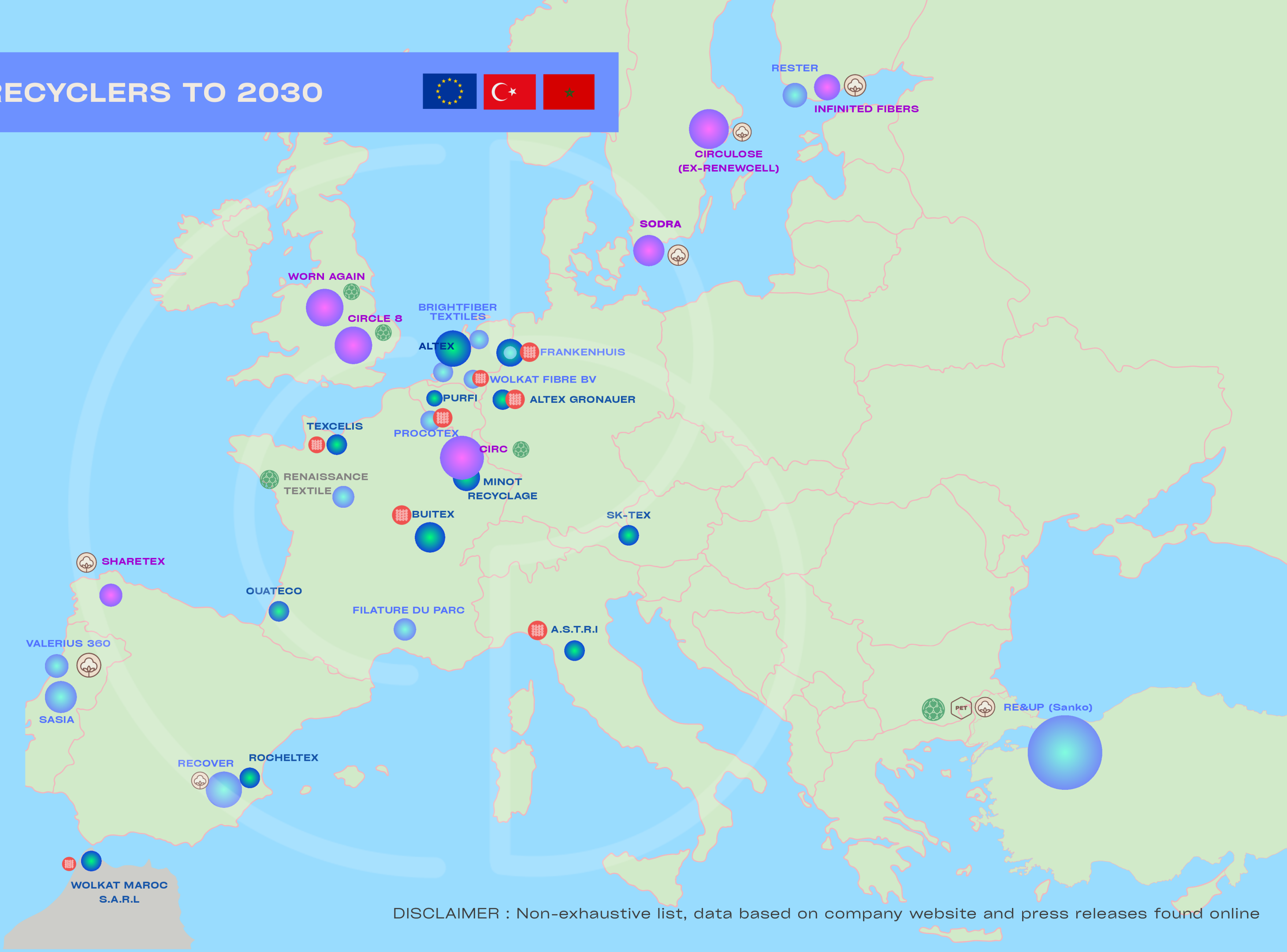
ANNUAL CAPACITY (Tons/year)

1 000 000

[50 000 - 70 000]

[25 000 - 30 000]

< 5 000



DISCLAIMER : Non-exhaustive list, data based on company website and press releases found online

MAPPING OF ALL RECYCLERS TO 2030

07

MAPPING OF ALL RECYCLERS TO 2030



FIBER INPUT

All fibers

Cotton

Polyester

Polycotton

CLOSED LOOP MECHANICAL RECYCLERS

OPEN LOOP MECHANICAL RECYCLERS

= +

CHEMICAL RECYCLING

ANNUAL CAPACITY (Tons/year)

1 000 000

[50 000 - 70 000]

[25 000 - 30 000]

< 5 000



DISCLAIMER : Non-exhaustive list, data based on company website and press releases found online

MAPPING OF ALL RECYCLERS TO 2030



FIBER INPUT

All fibers

Cotton

Polyester

Polycotton

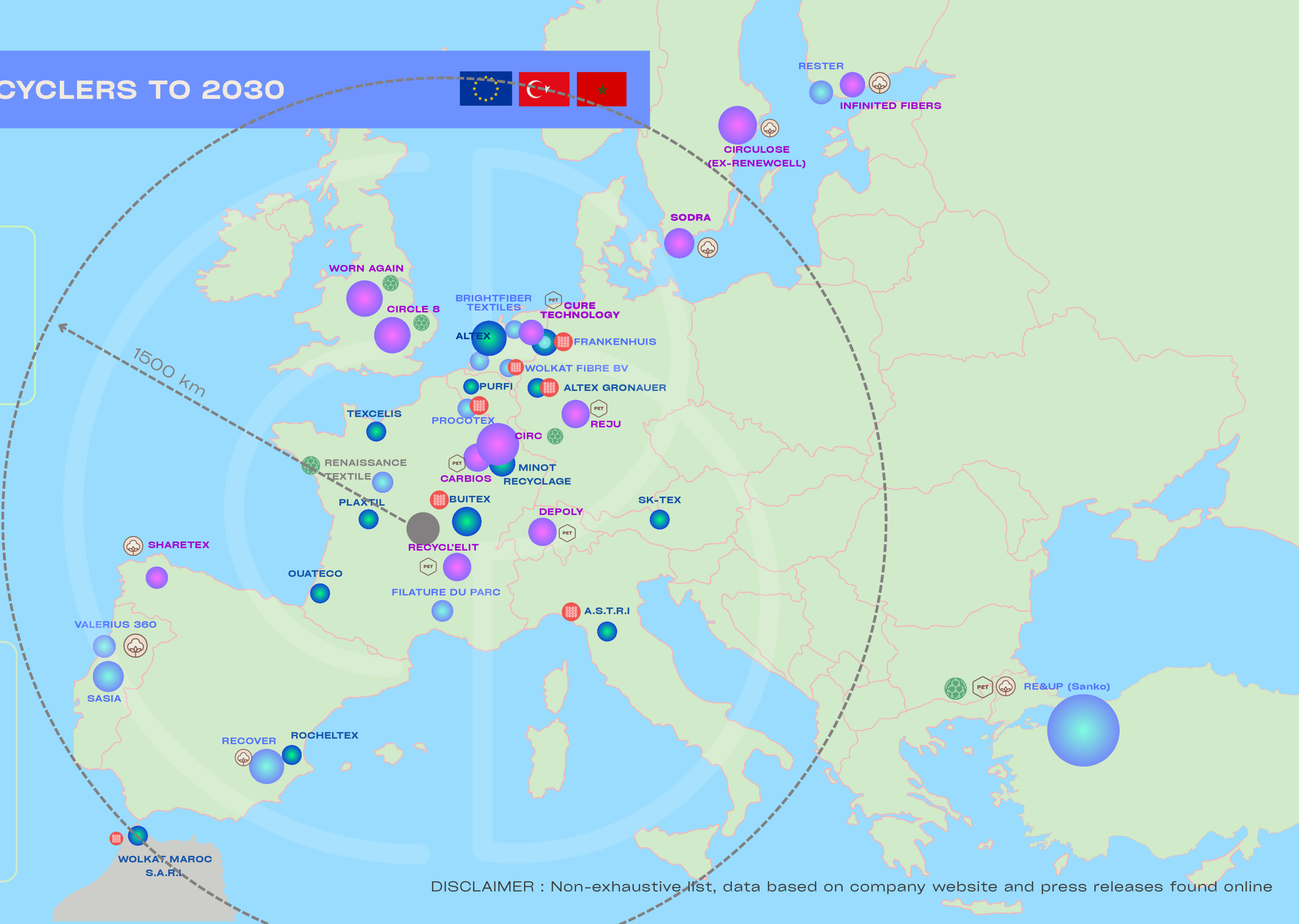
ANNUAL CAPACITY (Tons/year)

1 000 000

[50 000 - 70 000]

[25 000 - 30 000]

< 5 000



DISCLAIMER : Non-exhaustive list, data based on company website and press releases found online

MAPPING OF ALL RECYCLING INDUSTRY ACTORS TO 2030

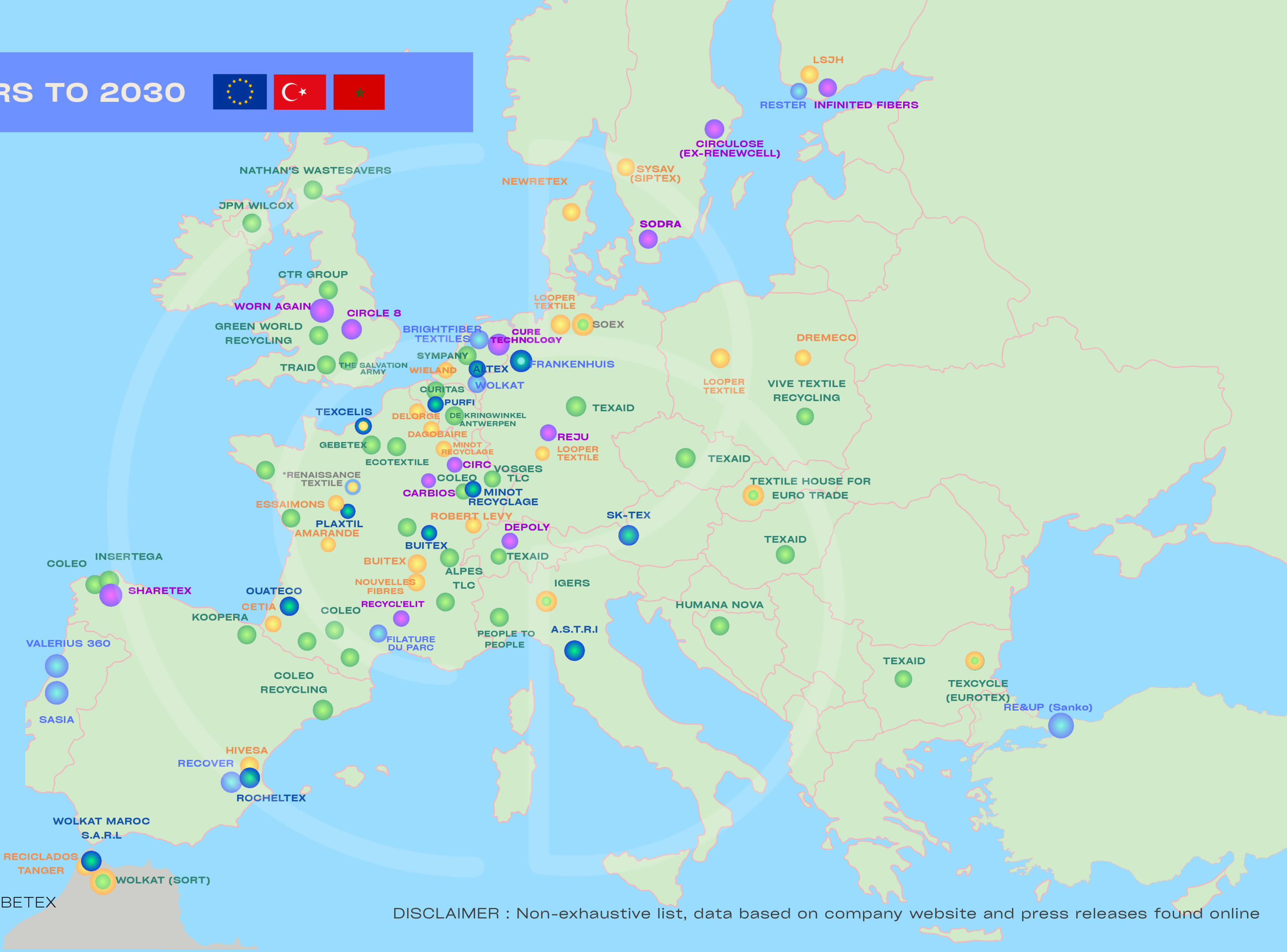
08

MAPPING OF ALL ACTORS TO 2030



LEGEND

- COLLECTOR-SORTERS
- PRE-PROCESSORS
- MECHANICAL RECYCLERS
- OPEN LOOP MECHANICAL RECYCLERS
- CHEMICAL RECYCLING
- * COMPANIES ON STANDBY AND/OR CLOSING DOWN



MAPPING OF ALL ACTORS TO 2030



LEGEND

 COLLECTOR-SORTERS

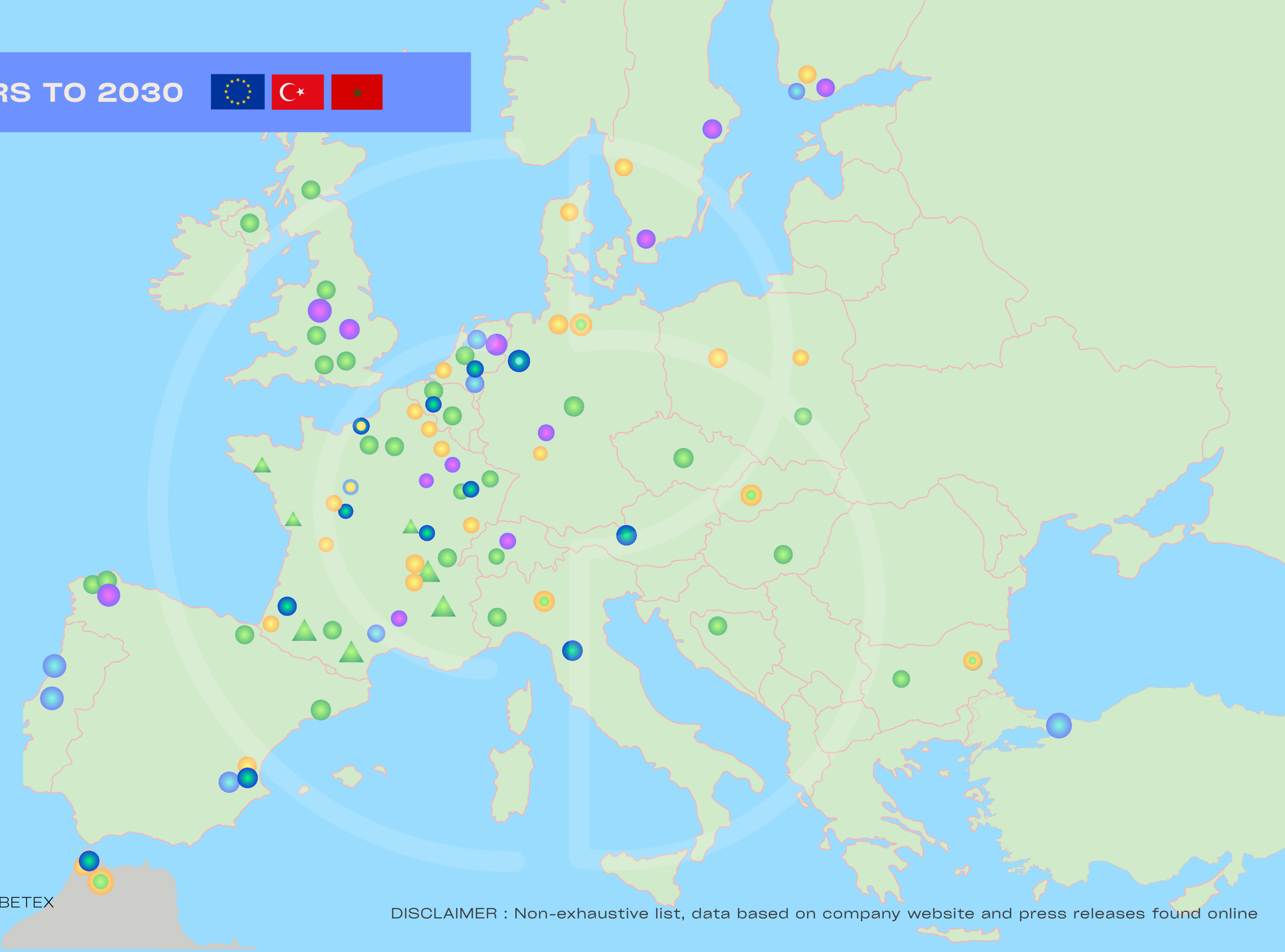
 PRE-PROCESSORS

 MECHANICAL RECYCLERS

 OPEN LOOP MECHANICAL RECYCLERS

 CHEMICAL RECYCLING

 COMPANIES ON STANDBY
AND/OR CLOSING DOWN



CONCLUSION

09

CONCLUSION: CAPACITY ESTIMATION

Reminder :

Based on 2019 year reference* (JRC) :

- Estimated sorting_capacity in the EU : **1.8 Mt/y**
- Estimated recycling_capacity in the EU : **0.70-0.85 Mt/y**
- Estimated recycling_capacity in the EU in 2030/2035 : **1.5-2.0 Mt/y**

**Techno-scientific assessment of the management options for used and waste textiles in the European Union, JRC, 2023*

Mapping results:

| Current capacity | | Capacity to 2030 | |
|--|--|-------------------------------|--|
| Collectors and pre-processors | Recyclers | Collectors and pre-processors | Recyclers |
| Around 0.7 Mt/y | Around 0.3 Mt/y | Around 0.9 Mt/y | Around 1.7 Mt/y* |
| Please note that the list of players identified in this mapping is not exhaustive, hence the difference between current capacities and those estimated in certain studies. | Some open-loop mechanical recyclers may have been counted as preprocessors, as it was sometimes difficult to decide on this limit, for example shredding and the manufacture of insulating or padding products | | It should also be noted that it is difficult to say today whether the recyclers who have announced the opening of factories and operational sites with certain quantities in 2030 will necessarily be ready to process all types of textile waste, since work is needed upstream to <u>ensure that textile waste, particularly post-consumer waste, can be processed as a whole.</u> *with 1 million announced by Re&up |

The mapping shows that to achieve the collection, sorting, preparation and recycling targets, the sector needs to develop and invest in technological and innovative solutions.



**YOU OPERATE IN THE TEXTILE RECYCLING SECTOR
AND YOUR COMPANY IS NOT ON THE MAP ?**



LET US KNOW VIA THIS PARTICIPATIVE [REGISTRATION LINK!](#)



NEXT STEPS:

- UPDATE MAPPINGS ACCORDING TO FEEDBACK RECEIVED
- SEPARATE COLLECTING CAPACITY AND SORTING CAPACITY

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