Mapping of products including recycled textiles

SECTION 1: Materials preparation stages

Sorted materials:
- Wool/synthetics blends
- Wool
- Cotton and other cellulosic fibres
- Viscose
- Cotton/synthetics blends
- Synthetics (polyester, polyamide, acrylic)

SECTION 2: Materials integration processes

Product examples
- Woven or knitted fabrics
- Yarn for technical woven or knitted fabrics
- Professional or housekeeping wiping cloths
- Sewing of fabric cuts
- Woven or knitted fabric scraps
- Plastics
- Paper
- Nonwovens
- Fibrous fillers
- Monomers
- Chemical spinning
- Mechanical spinning

Materials preparation stages:
- Manual or mechanical cutting (saw, die-cutting)
- Additive fillers
- Molding / injection or compressing
- Pelletizing
- Compressing
- Fine grinding
- Polymer blend
- Compounding (+ densification)

Chemical recycling:
- Chemical dissolution
- Enzymatic dissolution
- Chemical selective dissolution
- Depolymerization

Physical recycling:
- Coarse grinding / shredding
- Melting
- Compounding / Pelletizing
- Melting
- Compounding / Pelletizing
- Melting

Non-reusable textiles
- Woven or knitted fabrics
- Yarn for technical woven or knitted fabrics
- Professional or housekeeping wiping cloths
- Sewing of fabric cuts
- Woven or knitted fabric scraps
- Plastics
- Paper
- Nonwovens
- Fibrous fillers
- Monomers
- Chemical spinning
- Mechanical spinning

Chemical treatments (fire retardant, waterproof...)
- Chemical
- Mechanical
- Thermoforming
- Mechanical needle-punching
- Thermo-bonding or Spunlacing
- Airlay laying or Carding
- Mixing / dosage
- Chopping + Unravelling
- [Chopping +] Garnetting / Tearing

Mechanical recycling:
- Coarse grinding / shredding
- Melting
- Compounding / Pelletizing
- Melting
- Compounding / Pelletizing
- Melting

Structural insulation of buildings
- Nonwovens for structural insulation of buildings
- Moulded nonwovens for building equipment
- Substrates / geotextiles / green walls
- Nonwovens for the automotive industry
- Padding material for furniture and decorative items
- Equestrian floors
- Bricks, concretes and cements

Non-reusables
- Wool / synthetics blends
- Wool
- Cotton and other cellulosic fibres
- Viscose
- Cotton / synthetics blends
- Synthetics (polyester, polyamide, acrylic)

Manual or automatic trims removal BEFORE or AFTER materials sorting

For a 100% circular textile industry