#EUCircularTalks

Waste Framework Directive - Paving the way for a circular Textiles Industry

5 December 2023 - 14:30 - 16:30 CET













Preparation of extended producer responsibility for textiles in Germany

Dr. Sina Depireux

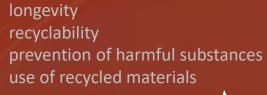
Section III 1.5 – Waste Management, Transboundary Shipment of Waste German Environment Agency

Umwelt
Bundesamt



Textile cycle

primary/secondary raw materials, water, chemicals



production/ product design



information and awarenessraising





recycling / recovery

consumption



second hand cleaning rags shredded fiber substitute fuel

collection

proper disposal, disposal infrastructure







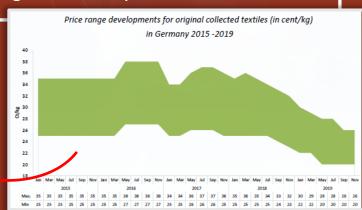
Textile waste - volumes





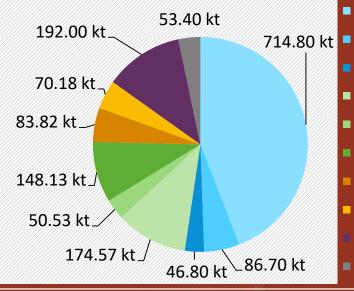
- voluntary collection system already established
- mandatory separate collection of used textiles from 2025 laid down in the German Circular Economy Act to be perceived by public disposal providers
- disposal system is currently mainly financed by secondhand sales
- increasing quantities and decreasing quality of collected textiles
 - → Disposal no longer financially viable in future

Disposal problem is looming in Germany!



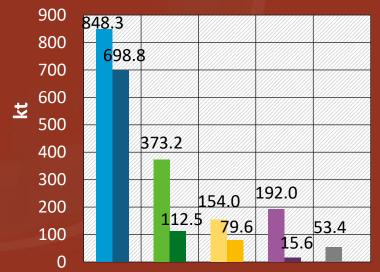
source: byse 2020

put on the market in 2021: 1.62 Mio. t



- sweaters, pants, nightwear, caps etc
- 714.80 kt stockings, underwear, tights etc.
 - workwear, swimwear, tracksuits, skiwear etc.
 - pillows, sleeping bags, blankets etc.
 - hand towels, tea towels, cleaning cloths etc.
 - bed linen, curtains, drapes, tablecloths, cushions for garden furniture etc.
 - shoes without leather (work and sports shoe sandals, slippers, etc.)
 - leather shoes (work and sports shoes, sandals slippers, etc.)
 leather goods, bags, backpacks
 - other (doll accessories, animal cushions, costumes etc.)

comparison of quantity put on the market vs. quantity collected



clothing
home textiles
shoes
leather goods
other

≈ 1,0 Mio. t collected textile waste

collection rate ≈ 62 %

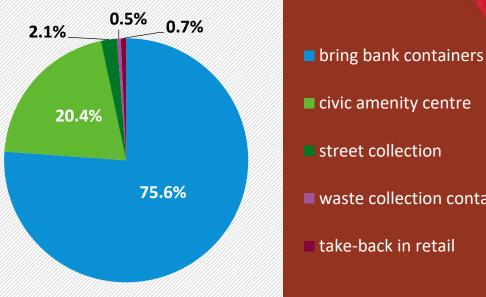
source: UBA-Texte 146/2023

Textile waste - collection



- collection mainly via bring bank containers (90-95%);take-back in retail to be neglected (0.7%)
- main collector: commercial/private collector (44.0%),followed by social enterprises (28.6%) and public disposal provider (26.9%)
 - → voluntary take-back (Producer, retail) to be neglected (0.5%)

Applied collection systems and their shares in 2018

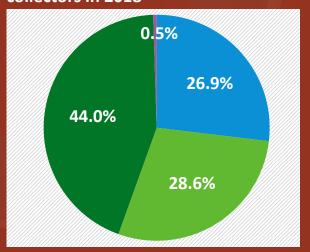




civic amenity centre

waste collection container

collectors in 2018



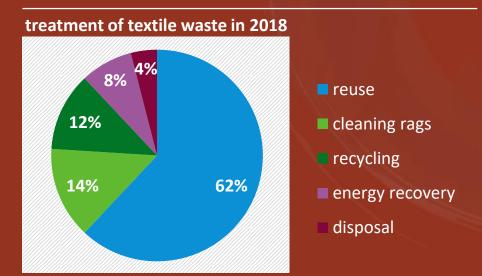
- public disposal providers
- social enterprises
- commercial/private collection
- voluntary take-back

source: UBA-Texte 32/2022

Textile waste – recycling / recovery



- no fiber-to-fiber recycling implemented on a large scale yet
- downcycling of used textiles to cleaning rags and ripped goods



- textile waste have not yet been specifically regulated with regard to resource-conserving waste management
- requirements in the German Circular Economy Act are not sufficient, as municipal systems are primarily designed for collection

▼ Introduction of extended producer responsibility is recommended, as it has the greatest positive effects on promoting the textile circular economy

Development of possible models of extended producer responsibility for textiles



source: byse 2020

Recommendations on the scope of the EPR and developed EPR-models



 all textiles that typically occurs in private households, i.e. both privately (b2c) and commercially (b2b) used textiles, should be included in the scope

clothing and accessories
shoes
home textiles (without carpets and matresses)
pillows and blankets

- special textiles (textiles with personal protective equipment, uniforms, etc.) separate consideration is necessary; need for research
- it should be excluded:
 - Textiles for animals or dolls
 - within the product groups, individual products should be excluded, such as ski or ice skates, wiping cloths, cleaning cloths





model 1 - Fund model



model 2 - Producer-led model



model 3 – systems in competition



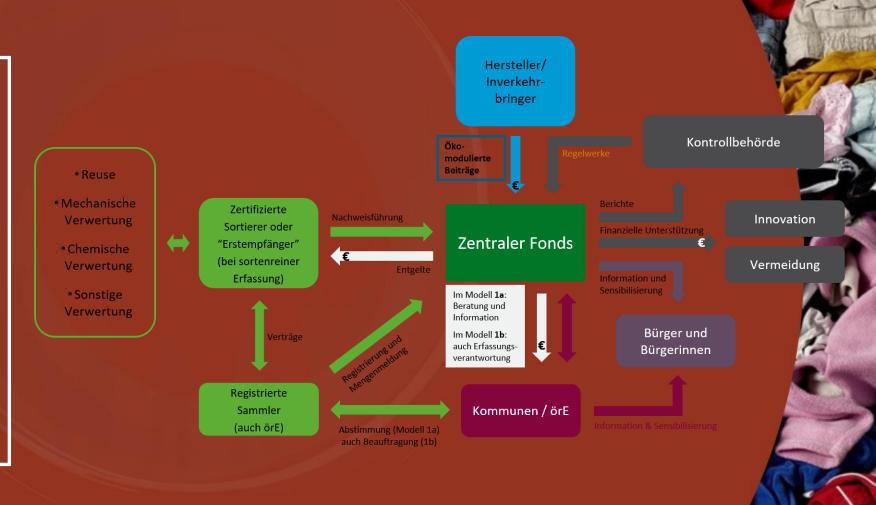
model 4 – contract model



▼ model 1 – Fund model



- Establishment of a central fund management agency
- Fees based on the textiles placed on the market, graduated according to ecological criteria
- Compliance with requirement to cover all costs, prohibition of cost overruns, principle of cost efficiency and transparency
- Direct financing from the fund where (financial) support is required (sorting, recycling, etc.)





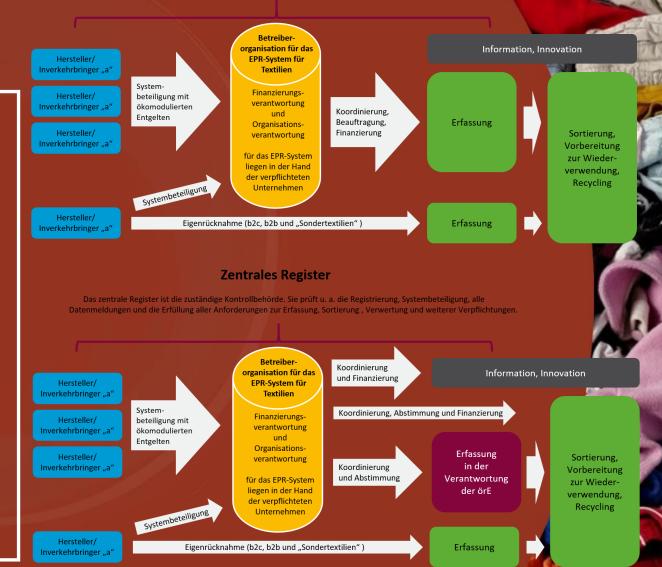
model 2 - Producer-led model

Zentrales Register

Das zentrale Register ist die zuständige Kontrollbehörde. Sie prüft u. a. die Registrierung, Systembeteiligung, alle Datenmeldungen und die Erfüllung aller Anforderungen zur Erfassung, Sortierung , Verwertung und weiterer Verpflichtunge



- Organizational and financing responsibility by obligated producers; non-profit organization
- Requirements for collection, preparation for reuse and recycling as well as communication, information and innovation
- Self-collection or participation in the jointly operated system; even in the case of self-collection, registration in central register and payment of fees for communication, information and innovation
- Control and consolidation of all information via central register
- Model 2b: collection by public disposal providers, assigned to the jointly operated system; self-collection of producers possible



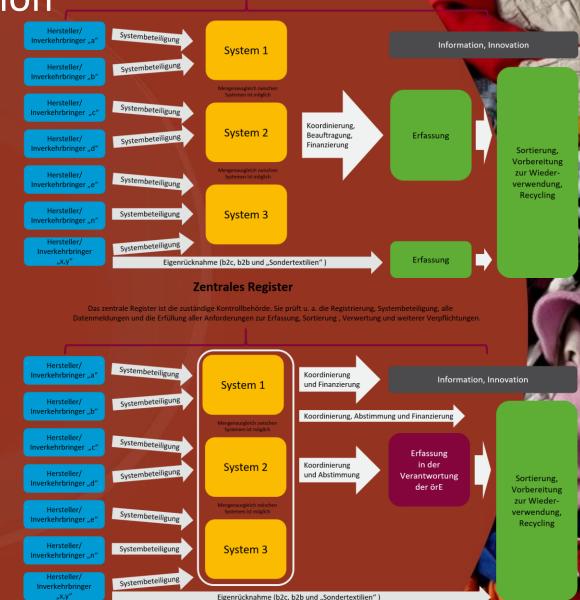
Zentrales Register



model 3 – systems in competition



- producers must generally participate in one or more systems with all textiles
- Several systems in competition can be set up; require approval by the competent authority
- All information from producers, the systems, collectors, sorters, recyclers and the implementation of further requirements (communication, information, innovation) converge in the central register
- Specific and verifiable requirements for the systems are defined by law
- very specific and restrictive as well as verifiable requirements for self-collection are laid down by law
- Competitive systems can make a profit

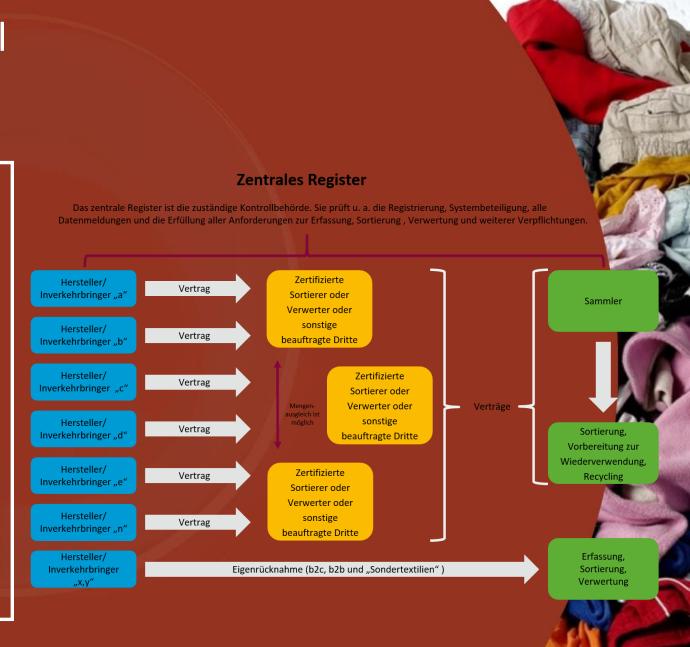




model 4 – contract model



- very specific and verifiable requirements are laid down by law for producers, which must be verified by producers or by authorized third parties
- No specific organizational structures are defined by law; there are no system approvals or system participation obligations
- Each producer must choose its contractual partners and structure the contracts with third parties in such a way that the legal requirements are fulfilled
- All information from producers, collectors, sorters, recyclers and the implementation of further requirements (communication, information, innovation) converge in a central register; third parties can be commissioned



Criteria for model analysis and discussion

Implementation

- a) Practicality and complexity of implementation
- b) Required bureaucratic and organizational effort
- c) Control options
- d) Possibilities for sanctions

Legal framework (EU)

- e) Consideration of the objectives of the EU strategy for textiles
- f) Compliance with the requirements of the Waste Framework Directive

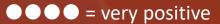
Infrastructure

- g) Building on existing infrastructure
- h) Comprehensive collection
- i) Strengthening preparation for reuse and recycling
- j) Consumer friendliness
- k) Involvement of non-profit organizations (social enterprises)

Financial aspects

- I) Secured financing of all necessary services
- m) Ecomodulation when levying charges
- n) Cost-benefit analysis/proportionality

The models were evaluated on the basis of various criteria.



●●O = positive

●●OO = neutral

●OOO = negative

OOOO = very negative



Model 1 - Fund model: less suitable; usually rated positively and neutrally; but extremely high bureaucratic and organizational effort



Model 2 - producer-led model: suitable; mostly rated positively and very positively; but antitrust aspects still need to be clarified



Model 3 - Systems in competition: suitable; mostly positively and neutrally rated; but ecomodulation is limited



Model 4 - contract model: significantly less suitable; predominantly negatively rated



Next steps towards extended producer responsibility



Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection

- internal discussion of model proposals and decision in favor of a model by Federal Ministry for the Environment
- discussion of the proposals for the amendment of the WFD at EU level by the Federal Ministry for the Environment
- discussion and exchange with German Environment Agency on specific design of the selected model





Questions, notes, comments?

Dr. Sina Depireux sina.depireux@uba.de

www.uba.de



UBA-Texte 32/2022 UBA-Texte 146/2023



bvse 2020

