



2022 LWG MEMBER CONFERENCE

Hybrid • September 22, 2022

SESSION 4:
Responsible Chemistry



SESSION 4

Responsible chemistry

Chemicals are used in the manufacture of many products, from your cell phone to your shoes. The LWG Member Conference calls for a greater understanding of chemical management and how we can all play our part in the responsible use of chemicals within the leather industry.

- 14:00 ● **Responsible chemistry within leather manufacturing**
Dr. Leticia Millward, *Leather Working Group*
- 14:10 ● **How EU regulatory activities impact European leather industry**
Andreas Bayer, *TEGEWA*
- 14:20 ● **Sustainable chemical management with the ZDHC Roadmap to Zero programme**
Elisa Gavazza, *ZDHC*
- 14:30 ● **Q&A Panel Discussion**
Panellists: Dr. Leticia Millward, Andreas Bayer, and Elisa Gavazza
- 14:50 ● **NEXT SESSION: ENVIRONMENTAL IMPACT**



Andreas Bayer

Senior Manager Chemicals Policy

TEGEWA

How EU regulatory activities impact European leather industry

In recent years, the EU regulatory landscape has made several proposals that will impact the leather industry. In his presentation, Andreas will give an overview of the proposed restrictions and potential impacts of regulations on skin sensitizing chemicals, glutaraldehyde, and bisphenols; as well as consider future activities under the EU Textile Strategy for Sustainability and Circularity.

Speaker Profile

Andreas joined TEGEWA, a non-profit chemical association based in Germany, as the Senior Manager for Chemicals Policy in 2020, focusing primarily on the leather and textile chemistry sectors.

Prior to joining TEGEWA, Andreas worked at the European Chemicals for Textile and Leather Association (EUCTL) and has spent over 20 years in a product safety role at CHT Germany GmbH, a chemical producer for multiple industries.

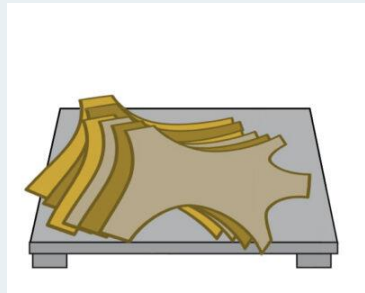
Andreas also holds a degree in chemistry from the University of Stuttgart.

LWG Conference – Responsible Chemistry

**How EU regulatory activities impact
European leather industry**

Milan September 22nd, 2022

Tanning is usually a 2 step process:



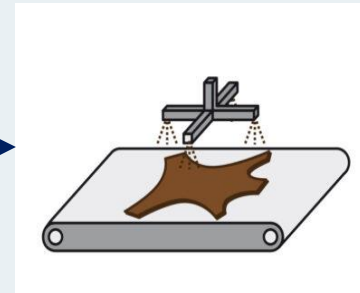
Rawhide
(sorting)



1. Tanning
Reactive substances
needed to build **3D-leather matrix** + durability
→ wet blue,
wet white,
wet green,
wet brown



2. Retanning
properties /
leather types
→ softness,
dimensional
stability,
light fastness,
dyeing, ...



Finishing
(waxing, dyeing,
impregnation,
coating, ...)



**Ready
made
leather**

Tanning agents relevant today for both tanning steps:

- **Synthetic tanning agents (syntans)** high volumes > 80 % of all leather articles contain so called syntans.
- **Chromium(III)-salts** high volumes > 75 of all leather articles contain chromium(III)-salts
- **Glutaraldehyde** main application: automotive industry
- **vegetabile tanning agents** currently the lowest amount of market relevant tanning agents

Current status BPA and BosC

→ announced restriction proposal



■ EU activities October 2020 – September 2022

- 10/2020: 1st Call for Evidence (ECHA) → i.a. proposal limit value
- 10/2021: 2nd Call for Evidence (BAuA) → i.a. proposal limit values
- 12/2021: EFSA expert body proposal of a new TDI for BPA
- 04/2022: Evaluation of 148 bisphenols (Repr.1B + ED assumed)
→ on ≈ 30 regulatory action proposed (ECHA)
- 05/2022: Harmonized classification BPS (18th ATP of CLP: Repr.1B)
- 05/2022: ED consultation BPF + BPAF (ECHA)
- 07/2022: BfR Draft opinion on EFSA TDI proposal
- 09/2022: SVHC intension on BPS: Repr.1B + ED (ECHA)

BPA / BPF / BPS = Bisphenol A / Bisphenol F / Bisphenol S

BosC = Bisphenols of similar concern

EFSA = European Food Safety Agency

TDI = Total daily intake

BAuA / BfR = German authorities on Chemical legislation and risk assessment

Repr.1B / ED = Reproductive Toxicity Cat. 1B / Endocrine Disruptor

■ Next steps

- 07/10/2022: Publication 1st restriction proposal BPA + BosC announced
= start of the restriction review process (takes 18 – 24 months)

EU regulatory activities related to leather tanning

Substance	Measurement	Impact	Timeline
Synthetic tanning agents [bisphenol impurities → BPF, BPS]	– REACH Annex XVII Restriction → proposed limit values on bisphenols <ul style="list-style-type: none"> ▪ 10 mg/kg (chemicals and articles) ▪ Migration: 0,04 mg/l (articles) 	⇒ EU + imports ⇒ synthetic tanning no longer possible – Approx. 80 % of all leather articles affected.	– 1 st restriction proposal announced for Oct. 7 th , 2022 – Followed by a restriction process (18 – 24 months) + transition time
Chromium(III)-salts [Cr(VI) impurities]	– REACH Annex XVII Restriction → proposal of limit value: 1 mg/kg [Chromium(VI)]	⇒ EU + imports ⇒ Chromium(III) tanning not validly testable. – Approx. 75 % of all leather articles affected.	– Final proposal by COM expected Q4/2022 – Publication of restriction expected Q1/2023+ transition time
Glutaraldehyde	– REACH Annex XIV authorisation → proposal to include in Annex XIV	⇒ EU only ⇒ Most important chromium-free alternative in the 1st tanning step drops only for Europe. ⇒ Significant impact for suppliers to the automotive industry.	– Inclusion decision possibly in Q1 or Q2/2023

Are vegetable tanning agents an alternative?

- vegetable tanning agents can not replace all volumes of:
 - Chromium(III)-salts (high volumes)
 - Synthetic tanning agents (high volumes)
 - Glutaraldehyde
- A realistic period for volume replacement would be:
7 – 10 years (Plant growth + land use)
- Even if volumes are sufficient, not all leather types / qualities are possible:
 - Only brown and hard leather can be made
 - Usually, loss of quality
 - Usually, higher consumption of chemicals
 - Usually, higher costs
 - Critical impact on wastewater

Conclusion

- Several parallel regulatory activities in the EU:
 - **Affecting leather**
 - **Endanger European leather industry**
- Possible remaining tanning process in the EU (vegetable tanning)
 - **European leather industry not competitive anymore**
 - **Low, remaining production volumes will no longer economically cover leather production in the EU**



Empowering consumers in the green transition

Substantiating Green Claims



ESPR

(Ecodesign for Sustainable Products Regulation)

= **Central element of EU Circular Economy**

1. Environmental performance
2. Information on sustainability and circularity of products
3. Incentives
4. Green public procurement

New ESPR product-specific rules

Complementing existing EU mandatory requirements

New rules under the current Ecodesign framework (while the transition is ensured)

Textiles strategy

Bio-based, biodegradable and compostable plastics

...

Construction products Regulation

Packaging and packaging waste regulations

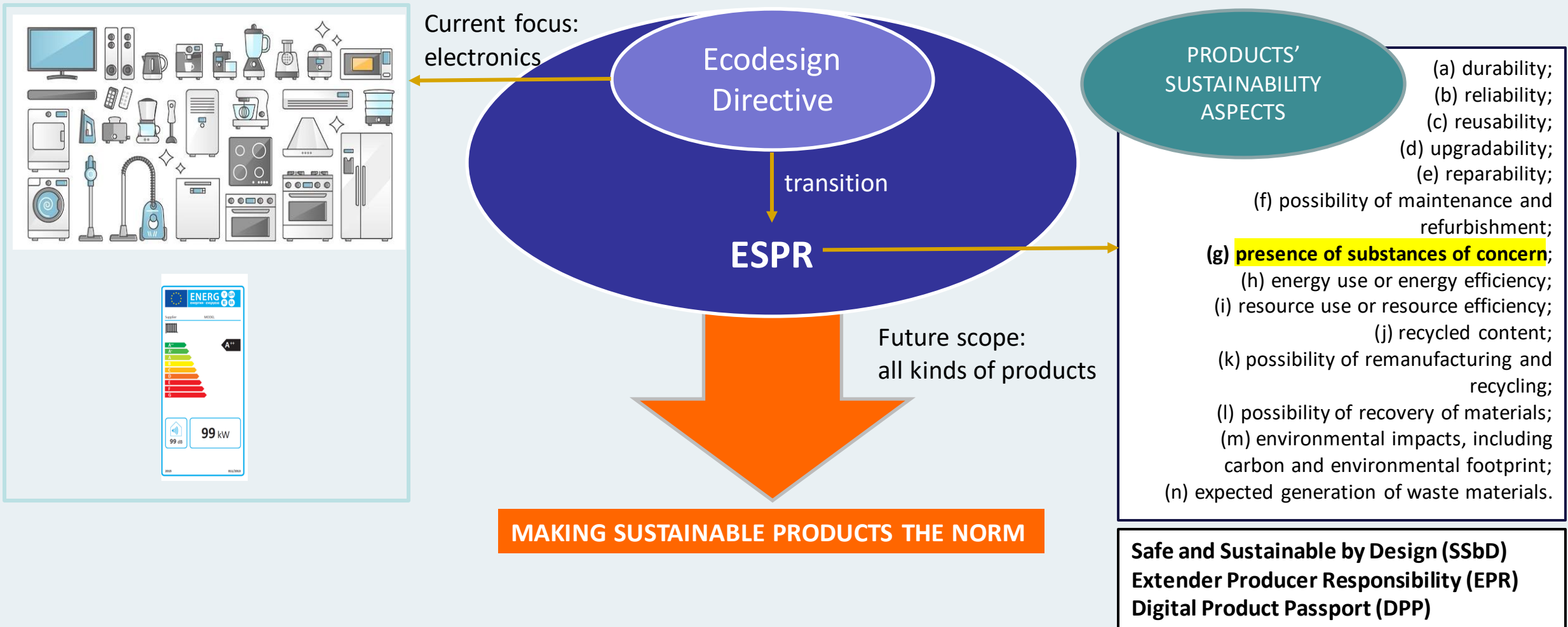
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European Commission Working Plan for the Ecodesign Directive (2022-2024)

Review of the Waste Shipment Directive

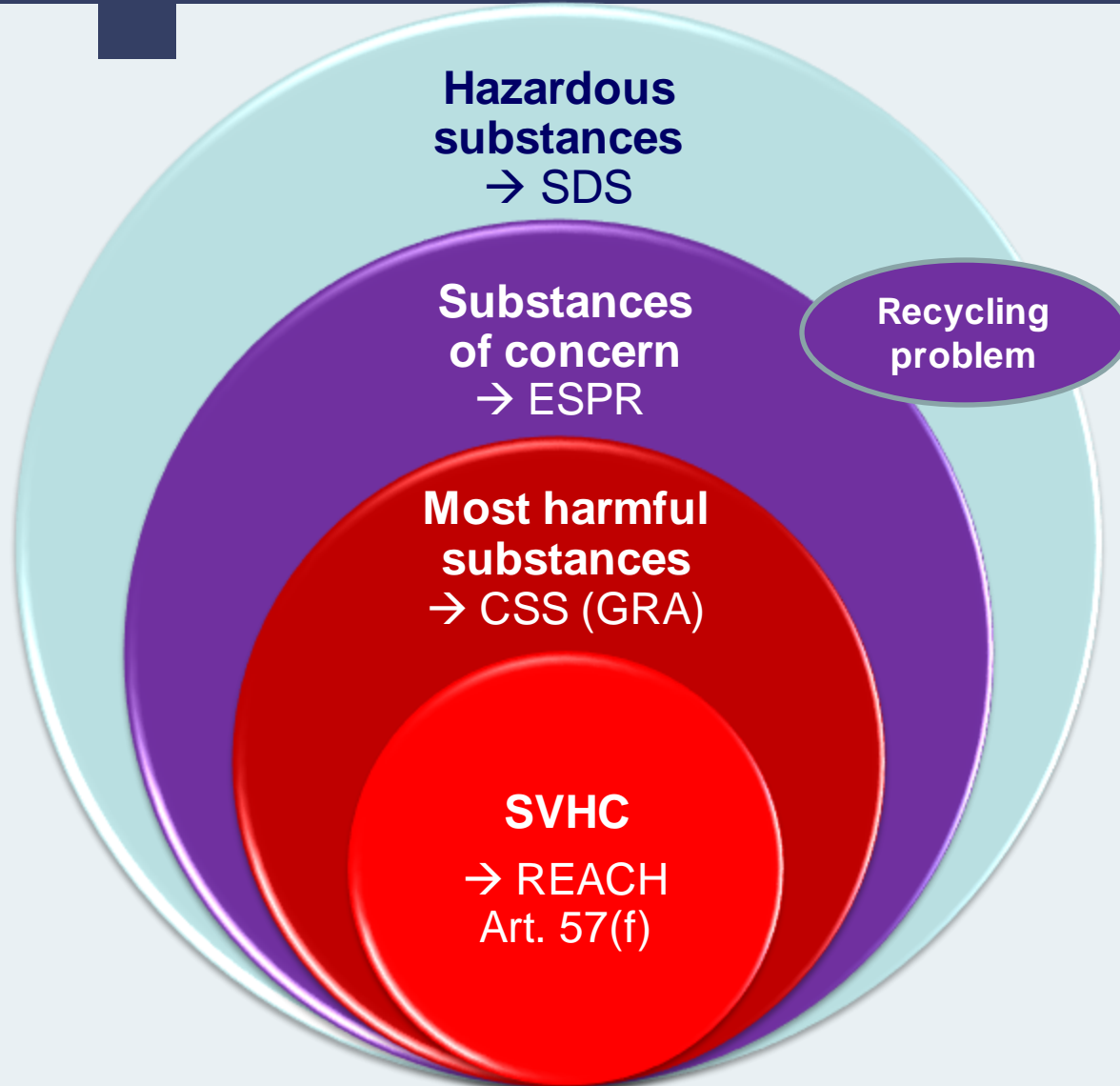
Review of the Industrial Emissions Directive

Ecodesign Directive → transition to ESPR



REACH revision + draft Ecodesign Framework Regulation

Substances affected increasingly by bans and exclusion criteria



Hazard Communication (SDS + label)
Substances with hazard classification according to CLP

Ecodesign exclusion criteria framework
SoC (substance of concern)
Substances listed below + STOT SE; skin sensitizer; aquatic chronic toxicity; suspected substances: CMR-, ED-, STOT RE/SE → problematic for recycling

Chemical Strategy for Sustainability (CSS)
Generic assessment for risk management (GRA)
→ Restrictions: consumer + professional uses
Most harmful substances
SVHC + Respiratory sensitizers; STOT RE;
Substances hazardous to the ozone layer

Current REACH Annex XIV (authorization)
+ XVII (restriction): SVHC Candidate List
Extension to endocrine disruptors + persistent mobile substances (PMT/vPvM)

Affected substance categories are dependent on pending decisions of the EU Commission - changes possible if necessary

- **Ecodesign for Sustainable Products Regulation (ESPR)**

March 2022: **Commission proposal regarding new ESPR regulation**

June 2022: Start co-decision procedure

Q3/Q4 2022: Discussion of delegated acts for products

- **CLP revision**

26.10.2022: **Commission proposal regarding CLP-Revision**

Q3/Q4 2022: Start co-decision procedure

Autumn 2022: Discussion of delegated acts for new hazard classes in CARACAL

- **REACH revision**

Q3/Q4 2022. Impact Assessment by Scrutiny Board of EU Commission

Q1 2023: **Commission proposal regarding REACH revision**

1st HY 2023: Start co-decision procedure

Leather - a high quality and durable material



- Leather is produced from a by-product / waste of meat production
- Leather is a typical example of an upcycling process in which a high-quality material is produced.
- **Leather is:**
 - Durable;
 - Reusable;
 - Can be maintained and repaired;
 - Can be remanufactured and recycled;
 - Can be recovered;
 - Can be biodegraded

and thus fulfills many aspects published in the draft Ecodesign for Sustainable Products Regulation (ESPR)

- **Will the ESPR shaping for the necessary use of substances (bio-based or chemicals) be such that the production and import of leather in the EU is still possible?**

Many thanks for your attention!

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Thank you!