

Toxic fashion and the conservation of nature – from chemicals law to civil society

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A. Chemicals in textile production

Questions about “correct” clothing have concerned people for a long time,¹ usually relating to fashionable, event-driven or practical aspects of clothing.² Textiles, however, also have a considerable impact on nature: large amounts of chemicals are used in the production of textiles,³ starting already at the manufacturing of the fibre. Natural fibres

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¹ Heike Holdinghausen, *Dreimal anziehen, weg damit. Was ist der wirkliche Preis für T-Shirts, Jeans und Co.*² (Frankfurt am Main: Westend, 2015) pp. 11-2; Claudia C. Ebner, *Kleidung verändert - Mode im Kreislauf der Kultur* (Bielefeld: transcript, 2007) pp. 15-6.

² Holdinghausen, *Dreimal anziehen*, p. 11; Ebner, *Kleidung verändert*, pp. 16-21; see also Martin Dinges, ‘Der „feine Unterschied“. Die soziale Funktion der Kleidung in der höfischen Gesellschaft’ (1992) ZHS 49-76, pp. 49-52.

³ Holdinghausen, *Dreimal anziehen*, pp. 73-91; Bundesministerium für Land- und Forstwirtschaft, Umwelt und Wasserwirtschaft (ed.), *Schickes Outfit! Neu? Ja, aber ökologisch! Tipps für*



like cotton, wool or silk are treated with pesticides when cultivated conventionally to protect them against pests,⁴ whereas many synthetic fibres such as polyester or elastane can only be obtained by using highly toxic chemicals.⁵ Yarn is produced by using adhesives, lubricants and oils⁶ and weaved with sizing agents.⁷ The emerging fabrics are often bleached and dyed chemically or treated with highly concentrated caustic soda and acid in order to obtain a smoother surface.⁸ As a last step, textiles are protected from pests, mould, fire, water, oil and dirt or from wrinkling and shrinking.⁹

These chemicals do not only directly affect humans by triggering allergic reactions to the consumer's skin or acting as carcinogens on workers in the manufacturing process,¹⁰ but also harm nature as they enter the waste water and thus pollute soil and kill fish.¹¹ This paper focuses on the damage to nature, as literature has so far mainly focused on the hazards for human beings¹² – a trend that can also be seen in law itself: chemicals legislation primarily protects the human population, and where it authorises the conservation of nature, this authorisation is again used in favour of humans. Existing restrictions and prohibitions protect humans from hazardous chemicals, whereas nature is only protected to the extent to which it directly benefits humans. This gap in protection can partly be closed by legal instruments without coercive nature, such as seals of quality, or by consumers when they decide to increasingly buy sustainably produced clothing. First it will be shown how chemicals legislation conserves nature (B.). On this basis, legal policy will be discussed in chapter C. Then, alternatives to coercive norms will be shown and it will be highlighted how society deals with this lack of protection of nature in textile production (D.).

umweltfreundliche Textilien (Wien: BMLFUW, 2014), pp. 8-10 and 22-56; Edith Piegsa, *Green Fashion, ökologische Nachhaltigkeit in der Bekleidungsindustrie* (Hamburg: Diplomica, 2010), p. 70.

⁴ BMLFUW, *Schickes Outfit*, pp. 24-5; Piegsa, *Green Fashion*, pp. 4-9.

⁵ Piegsa, *Green Fashion*, pp. 4 and 10-4; BMLFUW, *Schickes Outfit*, pp. 24-8.

⁶ Piegsa, *Green Fashion*, pp. 15-6.

⁷ Piegsa, *Green Fashion*, pp. 16-7.

⁸ BMLFUW, *Schickes Outfit*, pp. 36-56; see also Piegsa, *Green Fashion*, pp. 19-29.

⁹ This process is called „finishing“; see Piegsa, *Green Fashion*, pp. 19-29; BMLFUW, *Schickes Outfit*, pp. 36-56.

¹⁰ Holdinghausen, *Dreimal anziehen*, p. 90; BMLFUW, *Schickes Outfit*, pp. 9-10.

¹¹ Piegsa, *Green Fashion*, pp. 4-14, 20-3 and 26-7; BMLFUW, *Schickes Outfit*, pp. 25-9; Holdinghausen, *Dreimal anziehen*, pp. 73-7.

¹² See e.g. Sven Beckert, *King Cotton, eine Globalgeschichte des Kapitalismus*, 2nd edn. (Munich: C.H. Beck, 2015); Gisela Burckhardt, *Todschick. Edle Labels, billige Mode – unmenschlich produziert* (München: Wilhelm Heyne, 2014); Pietra Rivoli, *Reisebericht eines T-Shirts. Ein Alltagsprodukt erklärt die Weltwirtschaft* (Berlin: Ullstein, 2006), pp. 101-68.

B. Legal Regulations

Both European and national law regulate the use of chemicals in textile production within the EU. As companies usually distribute the various stages of production to different countries worldwide on grounds of cost,¹³ the import of textiles into the EU is also regulated. Chemicals legislation determines which chemical substances may be used in the production of textiles. To this end, it uses instruments known from environmental legislation as well as from General Administrative Law: restriction, authorisation and registration.¹⁴ A central role is taken by the European REACH regulation.¹⁵ This regulation classifies substances according to their hazardous nature, restricts highly dangerous substances categorically and permits the use of dangerous substances only with authorisation. Less dangerous substances must solely be registered.

The main protagonist of this regulation is the European Chemicals Agency (ECHA),¹⁶ which acts as a central platform for information about chemicals and handles the technical, scientific and administrative aspects of the regulation;¹⁷ decisions such as authorisations or restrictions are taken by the European Commission, and the Member States are also competent to some extent to regulate the use of chemicals.¹⁸

The provisions of REACH are linked to sanctions, which are laid down by national law.¹⁹ The Austrian Chemicals Act²⁰ provides for penalties which turn out to be

¹³ See e.g. Piegsa, *Green Fashion*, p. 3; Beckert, *King Cotton*, pp. 386-98; Monika Balzer, *Gerechte Kleidung* (Stuttgart: Hirzel, 2000), pp. 16-7.

¹⁴ Concerning the instruments of environmental law see Bernhard Raschauer, 'Umweltrecht Allgemeiner Teil' in Nicolas Raschauer and Wolfgang Wessely (eds.), *Handbuch Umweltrecht*, 2nd edn. (Vienna: Facultas, 2010) 13-45, pp. 21-6.

¹⁵ Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006

concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC.

¹⁶ See also Simone Hauser, 'Besonderes Umweltrecht', in Andreas Hauer and Michael Mayrhofer (eds.), *Umweltrecht – Grundriss für Studium und Praxis*, 2nd edn. (Linz: Pedell, 2015) 132-246, p. 205; and Martin Attlmayr, 'Chemikalienrecht', in Michael Holoubek and Michael Potacs (eds.), *Öffentliches Wirtschaftsrecht*, 3rd edn. (Wien: Springer, 2013) 723-826, pp. 739-40; Martin Führ, 'Einführung in die REACH-Mechanismen', in Martin Führ (ed.), *Praxishandbuch REACH* (Köln: Wolters Kluwer, 2011) 1-33, para 117-8.

¹⁷ See also the preamble of the REACH regulation, para 15.

¹⁸ REACH leaves a regulatory leeway for member states: Art 128 para 2 REACH.

¹⁹ Art 126 REACH.

surprisingly low compared to the potential harm: if, for example, restricted chemicals are used, the offending business will be penalized by the competent district administrative authority with a fine of at least € 500 and a maximum of € 20,180, and in case of a repeated infringement up to € 40,375.²¹

1. Restrictions

European as well as national law empower executive authorities to restrict the use of certain chemicals; they can stipulate conditions for the use of these substances or prohibit their use altogether. REACH empowers the European Commission to decree such restrictions if the use of a substance poses an unacceptable risk which ‘is not adequately controlled’ to human health or the environment.²²

This empowerment is usually not used for the benefit of nature: for example, Union law restricts the use of certain flame retardants only if the treated textiles are intended to come into contact with human skin.²³ However, these flame retardants can not only be highly toxic for humans but also for aquatic organisms such as small crustaceans.²⁴

National law does not fill this gap either: the Austrian Chemicals Act obliges executive authorities *inter alia* to ban substances which may cause danger to the life or health of humans or the environment.²⁵ Executive authorities, however, again use this empowerment mainly in favour of humans: the Austrian Chemicals Prohibition Order firstly prohibits the use of substances in textiles that come into contact with human

²⁰ Chemicals Act (Chemikaliengesetz 1996 - ChemG 1996), Federal OJ I 1997/53, as amended by Federal OJ I 2015/109; all Austrian federal statutes can be accessed via <https://www.ris.bka.gv.at/Bund> by their title, amendments can be found by their OJ number.

²¹ § 71 para 1 subpara 7, 8 and 15 ChemG; see also Hermann Götsch, ‘Grundzüge Österreichisches Chemikalienrecht – Übersicht’, in Hermann Götsch, Klaus Schaubmayr and Helmut Witzani (eds.), *Chemikalienrecht für österreichische Betriebe*, 2 vols. (Wien: WEKA 2015), vol. 2, register 12, chapter 1, 1-34, pp. 24 and 27.

²² Art 67-73 REACH.

²³ E.g. polybromated biphenyls: ECHA, *Annex XVII to REACH – Conditions of restriction*, <http://echa.europa.eu/documents/10162/bdd717aa-7466-40ce-8a46-08c83ecc3aeb>; see also (deutsches) Bundesinstitut für Risikobewertung, *Einführung in die Problematik der Bekleidungstextilien, Aktualisierte Stellungnahme Nr 041/2012 vom 6.7.2012* (2012), pp. 5-6: <http://www.bfr.bund.de/cm/343/einfuehrung-in-die-problematik-der-bekleidungstextilien.pdf>.

²⁴ Greenpeace, *Polybromierte Flammschutzmittel*, pp. 2-3, [www.greenpeace.org/austria/ Global/austria/dokumente/Factsheets/umweltgifte_polybromierte_flammschutzmittel.pdf](http://www.greenpeace.org/austria/Global/austria/dokumente/Factsheets/umweltgifte_polybromierte_flammschutzmittel.pdf); www.umweltbundesamt.at/umweltsituation/schadstoff/flammschutzmittel/.

²⁵ § 17 para 1 subpara 1 iVm § 3 para 2 ChemG; see also Hauser, ‘Besonderes Umweltrecht’, pp. 212-3; Atlmayr, ‘Chemikalienrecht’, pp. 782-3; and Thomas Wimmer, ‘Chemikalienrecht’ in Nicolas Raschauer and Wolfgang Wessely (eds.), *Handbuch Umweltrecht*, 2nd edn. (Wien: Facultas, 2010) 551-85, p. 578.

skin.²⁶ Secondly, it determines in which concentration these substances may be used.²⁷ Only the use of a few substances, namely cadmium and cadmium compounds as well as mercury compounds, is prohibited completely.²⁸ In this way, certain hazardous flame retardants can still be used in textile production.²⁹ Thus, they can be found in food and water and hence affect aquatic organisms in Austria.³⁰

According to REACH, the import of textiles into the EU may also be restricted or prohibited if the textiles were treated with chemicals which may not be used within the EU.³¹ Nonetheless this only applies to substances which could cause potential harm within the EU,³² for instance by being washed into the waste water. However, the use of a hazardous substance in the production *per se* is no ground for import restrictions under REACH.

National legislation provides for import restrictions as well,³³ but only for textiles which contain the hazardous chemical in a certain concentration or can come into contact with human skin.³⁴ Other textiles, however, may still be imported, even if pentachlorophenol was used in their production. A respective restriction exists for pentachlorophenol³⁵, which is used for pest control and is again toxic both to humans and aquatic organisms.³⁶ Textiles that were treated with pentachlorophenol may not be imported if they still contain the substance in a certain concentration at the time of

²⁶ §11 para 2 and § 13 para 1 Chemicals Prohibition Order (Chemikalien-Verbotsverordnung - Chem-VerbotsV), Federal OJ II 2003/477, as amended by Federal OJ II 2008/361.

²⁷ §§ 4 para 2, 6a para 1 subpara 3, 7 para 1, 8 para 1, 8a para 1, 11 para 5 Chem-VerbotsV allow the use of substances in a certain concentration.

²⁸ §§ 11a para 2, 11b para 1 and 18 para 3 Chem-VerbotsV.

²⁹ § 13 para 1 Chem-VerbotsV.

³⁰ www.umweltbundesamt.at/umweltsituation/schadstoff/flammschutzmittel/; Greenpeace, *Polybromierte Flammschutzmittel*, www.greenpeace.org/austria/Global/austria/dokumente/Factsheets/umweltgifte_polybromierte_flammschutzmittel.pdf.

³¹ Art 67-73 REACH; those substances are listed in Annex XVII, published online under <https://echa.europa.eu/addressing-chemicals-of-concern/restrictions/substances-restricted-under-reach>.

³² See also Art 68 para 1 REACH; and Martin Führ, 'Boxenstopp für die REACH-Verordnung' (2014) ZfU 270-80, p. 273.

³³ Chemicals Prohibition Order (Chem-VerbotsV), see FN 26.

³⁴ E.g. §§ 7 para 2, 8 para 2, 11 para 1, 11b para 2 Chem-VerbotsV; Also the national Product Safety Act only protects humans: It only allows products that harbour no dangers or dangers of such a low level as is acceptable for human safety to the market §§ 6 para 1, 4 para 1, 11 para 1 subpara 7 Product Safety Act (Produktsicherheitsgesetz); Federal OJ I 2005/16, as amended by Federal OJ I 2015/163.

³⁵ § 8 para 2 Chem-VerbotsV.

³⁶ Pentachlorophenol may e.g. harm organs; www.greenpeace.org/austria/de/marktcheck/News/kleidung/-2011/detox/chemikalien-fur-textilien-1/.

import.³⁷ Restrictions like these could have positive effects on nature in third countries if they motivated companies not to use the restricted substances in order to enable them to export their textiles. However, this protection is only an indirect one, as the restrictions focus on preventing the substance from coming into contact with European consumers.

2. Authorisation

Substances of ‘very high concern’ are apparently estimated as somewhat less dangerous by REACH. These are substances that can seriously affect human health and the environment, such as substances possibly affecting the hormonal balance of living beings.³⁸ Such substances may be used in textile production within the EU, but must be authorised by the European Commission.³⁹

This requirement does not apply to substances of very high concern used in third countries. In this case, the manufacturer or importer of textiles must only inform the ECHA about the import if the textiles contain the substance in a certain amount and concentration and if exposure to humans or the environment cannot be excluded.⁴⁰

3. Registration

For all other substances, REACH stipulates a notification procedure: if a company manufactures chemical substances in the EU or uses them in the production of textiles, these substances have to be registered with the ECHA.⁴¹

However, if textiles are imported into the EU, they must be registered with the ECHA only if they still contain a certain amount of these substances and are intended to be released to the consumer under normal or reasonably foreseeable conditions of use⁴² –

³⁷ § 8 para 2 Chem-VerbotsV.

³⁸ Art 57 para f REACH; see Hauser, ‘Besonderes Umweltrecht’, pp. 207-8; and Wimmer, ‘Chemikalienrecht’, pp. 563-4; First, such substances are collected in the Candidate List, then included in Annex XIV of the REACH regulation: Art 59 para 1 REACH; both lists are published on the ECHA’s website: <http://echa.europa.eu/web/guest/candidate-list-table>; <http://echa.europa.eu/addressing-chemicals-of-concern/authorisation/recommendation-for-inclusion-in-the-authorisation-list/authorisation-list>.

³⁹ Art 56 and 60 para 1 REACH; compare <http://echa.europa.eu/regulations/reach/authorisation/applications-for-authorisation> for the authorization procedure; see also Attmayr, ‘Chemikalienrecht’, pp. 751-2.

⁴⁰ Art 7 para 2 and 3 REACH; see also Wimmer, ‘Chemikalienrecht’, pp. 562-3.

⁴¹ Art 6 para 1 REACH.

⁴² Art 7 para 1 REACH; see also European Chemicals Agency, *Guidance on requirements for substances in articles* (Helsinki: ECHA, 2015), p. 18.

that would for instance apply to perfumed textiles.⁴³ In simple terms, it can be said that the import of textiles needs to be registered only when the substance used can still affect humans or nature within the EU – for example by triggering allergic reactions in consumers.

C. Considerations on legal policy

1. Granting nature legal personality

Since law is made by humans, it is not surprising that it puts human interests over those of nature.⁴⁴ However, it need not be this way: the Ecuadorian Constitution grants nature legal personality.⁴⁵ Austrian and German jurisprudence have also discussed the idea of environmental law representing the interests of trees and rivers as legal entities.⁴⁶ Austrian law partly gives nature a voice through environmental ombudspersons (Umweltanwaltschaften), who represent the interests of nature as public interests in certain proceedings.⁴⁷ However, granting nature legal personality would give it a legal value detached from the specific interests of humans.⁴⁸ As strange as this idea might seem at first, it is an inherent property of law to create new systems and thus raise new

⁴³ Fachverband der Textilindustrie Österreichs and Wirtschaftskammer Österreich, *REACH-Leitfaden Textilindustrie*, (Wien: WKO, 2008), p. 4: www.wko.at/Content.Node/Service/Umwelt-und-Energie/Chemie/EU-Chemie--REACH/Branchenfolder_Textilindustrie.pdf; see also ECHA, *Substances in articles*, p. 19.

⁴⁴ Concerning the anthropocentric focus of law see Maneesha Deckha, 'Initiating a Non-Anthropocentric Jurisprudence: The Rule of Law and Animal Vulnerability under a Property Paradigm' (2013) ALR 783-814, p. 783; Judith E. Koons, 'Key Principles to Transform Law for the Health of the Planet' in Peter Burdon (ed.), *Exploring Wild Law: The Philosophy of Earth Jurisprudence* (Kent Town: Wakefield Press, 2011) 45-58, p. 45; Cormac Cullinan, *Wild Law: A Manifesto for Earth Justice*, 2nd edn. (Totnes: Green Books, 2011), pp. 51-2; generally discussing anthropocentric approaches in environmental ethics: Uta Eser, 'Einschluss statt Ausgrenzung – Menschen und Natur in der Umweltethik', in Marcus Düwell and Klaus Steigleder (eds.), *Bioethik – Eine Einführung* (Frankfurt am Main: Suhrkamp, 2003) 344-53.

⁴⁵ Maria Bertel, 'Rechte der Natur in südamerikanischen Verfassungen' (2016) *juridikum* 451-60, pp. 453, 455-8; Eduardo Gudynas, 'Politische Ökologie: Natur in den Verfassungen von Bolivien und Ecuador' (2009) *juridikum* 214-8, pp. 214-5; see also Cormac Cullinan, 'If Nature Had Rights What Would We Need to Give Up?', in Peter Burdon (ed.), *Exploring Wild Law: The Philosophy of Earth Jurisprudence* (Kent Town: Wakefield Press, 2011) 230-5.

⁴⁶ Heinz Barta, *Zivilrecht – Grundriss und Einführung in das Rechtsdenken*, 2 vols. (Wien: Facultas, 2004), vol. 1, 2nd edn, pp. 534-5; Jörg Leimbacher, *Die Rechte der Natur* (Basel: Helbing and Lichtenhahn, 1988), pp. 29-116; Heinrich v. Lersner, 'Gibt es Eigenrechte der Natur?' (1988) NVwZ 988-92, p. 988.

⁴⁷ Especially in proceedings of nature conservation and in environmental impact assessment proceedings; see Raschauer, 'Umweltrecht Allgemeiner Teil', p. 24; Marlies Meyer, 'Die Landesumweltanwaltschaften' (2003) RdU 4-12; Johannes Hengstschläger and David Leeb, *Kommentar zum Allgemeinen Verwaltungsverfahrensgesetz* (Wien: Manz, 2014), § 8, para 12.

⁴⁸ See also Gudynas, 'Politische Ökologie', p. 216.

awareness also concerning nature: when in 1988 it was considered inappropriate that the law treated a dog just the same as a brick,⁴⁹ animals were distinguished from other property in the Austrian Civil Code.⁵⁰ This provision initially only served to create awareness that animals are living beings and deserve their own legal classification.⁵¹ In 2005, animals were also considered worthy of protection for their own sake: since then, the Animal Welfare Act ensures ‘the life and well-being of animals based on man’s special responsibility for the animal as a fellow creature.’⁵²

2. Further import restrictions

Still, the problem can be addressed in the context of known instruments even without such a shift of regulatory paradigm, for example by implementing import restrictions in Union law for textiles whose production harms the environment of the producing country. Moreover, such import restrictions would be compatible with international trade law. Pursuant to Article XX of the General Agreement on Tariffs and Trade (GATT), measures necessary to protect human, animal or plant life or health may be implemented.⁵³ According to the WTO, measures such as a ban on tuna that was not caught by dolphin-safe means are justified⁵⁴ if they do not constitute a means of arbitrary or unjustifiable discrimination between countries or a disguised restriction on international trade.⁵⁵

⁴⁹ Parliamentary Motion to amend the Austrian Civil Code (ABGB), IA 130/A 17. GP, p. 2.

⁵⁰ § 285a ABGB as amended by Federal OJ 1988/179; see Motion IA 130/A 17. GP, p. 2.

⁵¹ Karl Spielbüchler, ‘§ 285a’ in Peter Rummel (ed.), *Kommentar zum Allgemeinen bürgerlichen Gesetzbuch*, 3rd edn. (Wien: Manz, 2000), para 1; Motion IA 130/A, 17. GP, p. 2; Parliamentary Committee Report on Motion IA 130/A, AB 497 BlgNR, 17. GP.

⁵² § 1 Animal Protection Act (Tierschutzgesetz), Federal OJ I 2004/118, as amended by Federal OJ I 2013/80.

⁵³ Art XX para b General Agreement on Tariffs and Trade (GATT), Federal OJ 1951/254, as amended by Federal OJ 1993/369; see Mitsuo Matsushita, Thomas J. Schoenbaum, Petros C. Mavroidis and Michael Hahn, *The World Trade Organization*, 3rd edn. (Oxford: Oxford, 2015), pp. 716-68; Peter Van den Bossche and Werner Zdouc, *The Law and Policy of the World Trade Organization*, 3rd edn. (Cambridge: Cambridge, 2013), pp. 545-81; and Gerhard Loibl, ‘Internationales Umweltrecht’ in August Reinisch (ed.), *Österreichisches Handbuch des Völkerrechts*, 2 vols. (Wien: Manz, 2013), vol. I, 5th edn., 524-46, para 2168.

⁵⁴ GATT Panel Report, *United States – Restrictions on Imports of Tuna*, DS21/R (1991), unadopted; see also the reports on the Dispute Settlement No. 381 on the United States – measures concerning the importation, marketing and sale of tuna and tuna products; and Matsushita, Schoenbaum, Mavroidis, and Hahn, *World Trade Organization*, pp. 722-4.

⁵⁵ Art XX GATT; see Loibl, ‘Internationales Umweltrecht’, para 2169 on the United States’ restrictions on the imports of tuna.

3. Enforcement by competitors as a means of abuse control

Nevertheless, import restrictions might cause difficulties in practice: the competent authorities might have trouble determining whether a particular substance has been used in textile production when the in question substance can no longer be detected in the imported textiles. Here, however, the dynamics of competition could be used and competitors themselves could reveal abuses.⁵⁶ Their economic self-interest often poses greater motivation to pursue violations than regulations imposed by governmental and supranational authorities. Competitors often also have better access to information about violations because they know the industry and the market. When textiles that have been treated with restricted chemicals are imported into the EU, competitors could sue the importing company under circumstances for a cease-and-desist order on grounds of the Austrian Federal Act Against Unfair Competition (UWG).⁵⁷ Such practices can – especially if they are not supported by a reasonable interpretation of the law – constitute an advantage in competition by breaking the law under § 1 para 1 subpara 1 UWG and thus constitute a breach of competition.⁵⁸

D. Alternatives to coercive norms

1. Corporate Commitment

On the basis of these findings, it becomes clear that European as well as national law can only partially regulate the international production of textiles. The fact that textile companies act in several countries around the world makes them legal entities in several jurisdictions⁵⁹ which regulate the use of chemicals in different ways. Therefore, law and society look for alternatives to coercive norms.

One existing alternative are seals of quality, which are awarded by independent bodies. They certify i.a. whether hazardous chemicals were used in textile production. Many of these have a broad look at the environmental impact of textiles and do not only narrow

⁵⁶ See also Paul Oberhammer, 'Kollektiver Rechtsschutz bei Anlegerklagen' in Susanne Kalss and Paul Oberhammer, *Anlegeransprüche – kapitalmarktrechtliche und prozessuale Fragen*, (Wien: Manz, 2015) 73-160, p. 76, who discusses the global trend to solve political discourse by means of civil procedure.

⁵⁷ Bundesgesetz gegen den unlauteren Wettbewerb (UWG), Federal OJ 1984/448, as amended by Federal OJ I 2015/49; see Peter Burgstaller, Andreas Frauenberger, Christian Handig et al, '§ 1 UWG', in Andreas Wiebe and Georg E. Kodek (eds.), *Kommentar zum UWG*, 2nd edn. (Wien: Manz, 2016), para 22.

⁵⁸ See Burgstaller, Frauenberger, Handig, et al, '§ 1 UWG', para 22.

⁵⁹ See also Beckert, *King Cotton*, pp. 386-98.

their focus on substances that are hazardous for humans.⁶⁰ Since there are many different seals, however, each certifying different criteria, it quickly gets confusing for consumers.⁶¹ As a result, many consumers do not pay attention to seals of quality when they buy clothes.⁶²

In order to provide orientation in this jungle of seals, it would be useful to again impose a coercive legal instrument, such as minimum requirements for certification.⁶³ Thus, the state as an independent body would constitute ecological minimum standards, which of course private seals of quality could outbid.⁶⁴ Existing seals of quality could act as models for the development of these minimum standards, e.g. the Austrian or European Ecolabel, or the internationally recognized Global Organic Textile Standard (GOTS). These seals certify textiles that were not treated with certain harmful chemicals such as pentachlorophenol⁶⁵ and could provide models for the statutory minimum standard.⁶⁶

By now, ecologically produced fashion is not just a marginal phenomenon on the market. This is why many companies e.g. offer collections made with organic cotton.⁶⁷ By doing so, they benefit from the consumers' confusion about the existing seals of quality by introducing their own ecological standards.⁶⁸ Companies such as Adidas, Gap and H&M form associations like the 'Better Cotton Initiative', whereby they oblige

⁶⁰ See BMLFUW, *Schickes Outfit*, pp. 12-16; Bundesministerium für Verkehr und Technologie (ed.), *Ökotextil-Labels in Österreich* (Wien: BMVIT, 2009), pp. 8-9 and pp. 17-35.

⁶¹ Andreas Engelhardt, *Schwarzbuch Baumwolle* (Wien: Deuticke, 2012), pp. 45-9; BMVIT, *Ökotextil-Labels*, p. 8.

⁶² Holdinghausen, *Dreimal anziehen*, pp. 174 and 179.

⁶³ See BMVIT, *Ökotextil-Labels*, p. 8; Remo Klinger, Constantin Hartmann and David Krebs, 'Vom Blauen Engel zum Bekleidungsengel? Umweltsiegel als Vorbild staatlicher Zertifizierungen in der Textilindustrie' (2015) ZUR 270-7, p. 273.

⁶⁴ Klinger, Hartmann and Krebs, 'Umweltsiegel', pp. 273 and 276.

⁶⁵ BMLFUW, *Schickes Outfit*, p. 13; Bundesministerium für Land- und Forstwirtschaft, Umwelt und Wasserwirtschaft (ed.), *Das Österreichische Umweltzeichen* (Wien: BMLFUW, 2014); BMVIT, *Ökotextil-Labels*, pp. 20-1; http://ec.europa.eu/environment/ecolabel/index_en.htm; this certification meets a demand, as Appendix XVII of REACH prohibits the import of textiles that were treated with pentachlorophenol only if they still contain the substance in a certain concentration (see <https://echa.europa.eu/documents/10162/f92b0bfe-82ca-4a4d-b618-c674065c9d9e>). GOTS, however, certifies the whole production process: see BMVIT, *Ökotextil-Labels*, p. 23; BMLFUW, *Schickes Outfit*, p. 13; <http://www.global-standard.org/de/>.

⁶⁶ Concerning the situation in Germany see Klinger, Hartmann and Krebs, 'Umweltsiegel', pp. 272-7.

⁶⁷ E.g. H&M offers a collection called „Conscious“: www.hm.com/at/products/ladies/selected/conscious-sustainable-style.

⁶⁸ See e.g. the standards of production of ZARA: www.zara.com/at/en/info/company/our-mission-statement-c18001.html, or Esprit: www.esprit.com/company/sustainability; see also Engelhardt, *Schwarzbuch Baumwolle*, pp. 46-7; BMLFUW, *Schickes Outfit*, p. 12.

themselves to abstain from certain pesticides in conventional cotton farming.⁶⁹ However, this system of “greenwashing” lacks external controls on whether the production actually corresponds to the publicized standards.⁷⁰ Apparently, REACH creates a remedy for this: it provides consumers with a right to information on the hazardous chemicals contained in articles of clothing⁷¹ in order to enable them to take informed decisions.⁷² However, this instrument does not enable consumers to find out whether environmentally harmful chemicals were used in the production.

Yet another form of self-regulation is the labelling of textiles with a melodious attribute – for example as “conscious”, like H&M does.⁷³ The company communicates a sustainable approach to its textile production – however, this designation remains devoid of content, since it is not clear what it stands for, and again, no independent body is involved.⁷⁴

2. Powers of civil society

A closer look at the contexts of textile production therefore adds an entirely new dimension to the everyday question ‘What should I wear?’.⁷⁵

Through buying decisions, civil society has great power for change: if consumers boycott a particular company for ecological reasons, the company can very quickly lose its reputation and a lot of money.⁷⁶ Ironically, even though the fashion industry constantly influences the needs of their customers by fast-changing fashion trends, it is also always striving to meet their will.⁷⁷ Therefore, if consumers want to buy textiles that were not produced with environmentally harmful chemicals, textile companies will

⁶⁹ BMVIT, *Ökotextil-Labels*, p. 17.

⁷⁰ BMVIT, *Ökotextil-Labels*, p. 18; generally addressing the lack of control with greenwashing: Holdinghausen, *Dreimal anziehen*, p. 174; BMLFUW, *Schickes Outfit*, p. 12.

⁷¹ Art 33 para 2 REACH; see also Martin Führ, ‘Boxenstopp für die REACH-Verordnung – Teil 2’ (2014) ZfU 329-36, pp. 332-3; Führ, *REACH*, para 122; Bernd Steffensen, ‘Konsequenzen für den Verbraucherschutz’, in Martin Führ (ed.), *Praxishandbuch REACH* (Köln: Wolters Kluwer, 2011) 415-434, para 21-6 and 36-44; the German Federal Environmental Agency (Umweltbundesamt) has set up an online form: <http://reach-info.de/verbraucheranfrage.htm>.

⁷² See also Hauser, ‘Besonderes Umweltrecht’, pp. 204-5.

⁷³ <http://about.hm.com/de/About/sustainability/hm-conscious/conscious.html>; Holdinghausen, *Dreimal anziehen*, p. 174.

⁷⁴ Holdinghausen, *Dreimal anziehen*, p. 174.

⁷⁵ See also Holdinghausen, *Dreimal anziehen*, p. 11.

⁷⁶ See Magdalena Pöschl, ‘Sicherung grund- und menschenrechtlicher Standards gegenüber neuen Gefährdungen durch private und ausländische Akteure’, 74 *VVDStRL* (2015) 405-52, p. 435, who discusses the powers of consumers against internationally producing companies that violate human rights.

⁷⁷ Ebner, *Kleidung verändert*, pp. 109-14.

attempt to satisfy this demand. Still, in order to exercise its power, civil society needs information on the chemicals used in the process of production.⁷⁸ The law has created such instruments as the aforementioned right to information in the REACH regulation – however, as has been shown these instruments primarily protect humans.

Still, actions like the ‘Detox’-campaign show that consumers can have major impact if they join forces with NGOs: Greenpeace asked some well-known companies not to use environmentally harmful chemicals in their production of clothing.⁷⁹ As a result, many large enterprises turned to self-regulation: for example, Adidas, H&M, Levi's and Benetton among others bound themselves not to use certain environmentally harmful chemicals in their production.⁸⁰

Despite this potential, responsibility should not be passed on to civil society completely. A combination of responsible regulation and sustainable consumer behaviour would be desirable.

E. Conclusion

European and national chemicals law primarily protects humans. This can be seen at the level of legislation as well as enforcement: when textiles are produced within the EU, the REACH regulation and the Chemicals Act authorize the restriction of the use of environmentally harmful chemicals. Executive authorities, however, mainly focus on the final product and either impose thresholds or restrict chemicals solely in textiles that come into contact with human skin. Thus, the harmful chemicals can still be used in the production process and continue to harm the environment as long as these substances are not found in high concentration in the final product or literally get into contact with European consumers.

Regarding import, there are significant gaps in the legislation intended to offer environmental protection: the import of textiles is only regulated by chemicals law if the substance used in a third country can still be found in the textile and could thus exert its harmful effects within the EU. This shows that damage inflicted on nature is only regarded as in need of regulation if it occurs within the EU, for instance if it pollutes the residual water there. However, the import of textiles into the EU is permitted if the used substance damages the environment in the production countries.

⁷⁸ Klinger, Hartmann and Krebs, ‘Umweltsiegel’, pp. 271-2; see also Pöschl, ‘Sicherung grund- und menschenrechtlicher Standards’, p. 437; Raschauer, ‘Umweltrecht Allgemeiner Teil’, pp. 23-4.

⁷⁹ www.greenpeace.org/austria/de/themen/umweltgifte/was-wir-tun/detox/.

⁸⁰ Holdinghausen, *Dreimal anziehen*, pp. 73-7; www.greenpeace.org/austria/de/themen/umweltgifte/was-wir-tun/detox/.

This shows that environmental legislation mainly intends to protect humans and the space in which they live. It is also concerned with other creatures and preserves rivers as a habitat for fish for instance.⁸¹ However, the concept of nature being worthy of protection for its own sake – detached from its serving function as a living environment – is widely discussed and partly recognized.⁸² Nevertheless, chemicals legislation does not reflect this.

To some extent, this lack of protection is met by non-coercive instruments: seals of quality inform about chemicals that were used in the manufacturing process. Since each seal certifies different standards, statutory minimum standards for certification would be useful to enable consumers to obtain an overview.

Manufacturing companies partly impose ecological standards on themselves, which are not monitored by independent bodies. Therefore, consumers themselves – partly with the help of NGOs – influence companies to self-regulate or to increase their range of ecologically produced textiles either through campaigns or through their buying decisions.

This shows that the production of textiles has considerable impact on nature. Legislation and executive authorities, however, do not sufficiently protect nature, leaving a margin of action to consumers and producing companies.

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⁸¹ See Raschauer, ‘Umweltrecht Allgemeiner Teil’, p. 17.

⁸² See Raschauer, ‘Umweltrecht Allgemeiner Teil’, p. 19; and from an ethical perspective Eser, ‘Einschluss statt Ausgrenzung’.

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