# 

# 

# 

# **CHAIR REPORT**

## **Environmental Committee (GA4)**

## **Ensuring that measures are taken to prevent textile factories from creating unmanageable levels of pollution.**

## 

## **Teoman Kerki (Deputy President)**

## **Introduction**

The textile industry is one of the biggest industries in the world, having an estimated size of 925 billion dollars in 2018. However, it is also one of the biggest contributors to air and water pollution. Cotton, a key plant to the textile industry requires a lot of water to be raised properly. Due to this fact, almost 10% of all agricultural chemicals and 25% of pesticides are consumed by cotton while only 2.3% of the world’s agricultural land is used for it. On the other hand, the manufacture of nylon-a a vital part of the textile and fashion industry- which is a synthetic polymer in factories creates a greenhouse gas called nitrous oxide. According to, the United States Environmental Protection Agency, this greenhouse gas is 298 times as potent as Carbon Dioxide, the most common greenhouse gas. Furthermore, the textile industry contributes to water pollution as much as it does to air pollution. 20 percent of freshwater pollution is made by the textile industry alone. Polyvinyl chloride used by textile factories to dye and lighten fabrics, and other chemicals such as formaldehyde, and mercury can cause cancer among other diseases. When these dyed and lightened fabrics get washed these chemicals get into the water and textile factories have been found to release this wash water into waterways and groundwater sources. The Member States should cooperate with the other Member States, textile companies and None-Governmental organizations to find a solution to this vital issue before the pollution levels created by the textile factories become unmanageable.

**Key Vocabulary**

Synthetic fibers: Synthetic fibers are fibers made from chemical reactions that have the goal of replacing natural materials. The most common synthetic fibers in the textile industry include nylon, spandex, and polyester. When clothes made from these synthetic fibers are washed, the microplastics in these fibers are released into the water, creating water pollution.

Air Pollution: Air pollution is the release of chemicals into the air to the extent that those chemicals propose a threat to the environment. The textile factories consume a lot of energy, therefore releasing a lot of greenhouse gasses. Along the production line, greenhouse gasses are released when heating, bleaching, and printing. These gasses include CO2 (Carbon Dioxide) and nitrous oxide, sulfur dioxide, and hydrocarbons along with other greenhouse gases.

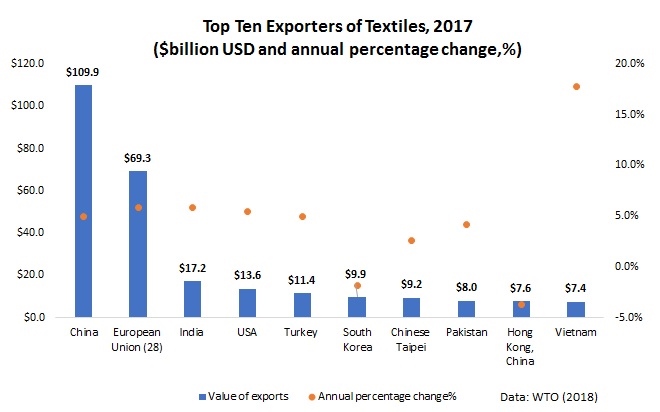
Water Pollution: Water pollution is when hazardous substances are released into groundwaters, rivers, lakes, oceans, and/or other water sources; to the extent that these chemicals disturb the ecological system of that water body. The textile industry and factories create ⅕ of industrial water pollution by using 20.000 different chemicals. The water pollution caused by the textile industry has caused both environmental effects, like destroying the ecosystems in rivers in China and Indonesia, and on humans, increasing the risk of diseases and cancer for communities living close to those rivers.

Greenpeace: Greenpeace is an international NGO (Non-Governmental Organization) that tackles problems that threaten the environment. In July 2011 Greenpeace has launched the Detox campaign. An international campaign that challenges big clothing companies to eliminate the usage of hazardous chemicals in their products. Companies such as but not limited to Valentino, Adidas and Tchibo have committed to the Detox campaign, promising to stop the usage of hazardous chemicals in some of their products in the near future.

Natural Resources Defense Council: NRDC (Natural Resources Defense Council) is an NGO based in the United States of America that aims to protect the environment, plants, animals, and people from pollution. In 2009 NRDC has launched Clean By Design initiative. NRDC in collaboration with such companies as GAP and H&M that aims to save energy, water and use fewer chemicals while manufacturing textile.

**Focused Overview**

In recent years awareness about water and air pollution has increased due to activists like Greta Thunberg and climate strikes. The majority of the textile factories are in nations where there are either no laws about regulations for these factories or they are not enforced. This is because of the lack of regulations and laws the cost of manufacturing textiles is cheaper. India, Bangladesh, and China are among the countries with most pollution due to textile factories. Most of these countries might have laws regarding this issue however they do not enforce it properly due to the high bribery rates and lack of economic power. However, some countries are trying to improve the situation. For example, since 2016 China has been creating new laws about stricter restrictions as a part of their war against pollution.

**This graph shows the top exporters of textiles in 2017**

Around 10% of the total greenhouse gasses are released by the textile industry. In textile factories, while boiling the wash water deadly greenhouse gasses named nitrous oxides and sulfur dioxides are released. These gasses are more deadly and potent compared to carbon dioxide, which is the most common greenhouse gas. Moreover, printing operations in the textile factories lead to the release of hydrocarbons and ammonia. All of these greenhouse gasses are carried with winds all over countries which causes health problems for citizens. One of the biggest contributors to water and air pollution is the textile industry and textile factories. Around 20% of all freshwater pollution can be traced back to the textile industry. Textile factories use polyvinyl chloride to size fabrics; benzidine, and toluidine as dyeing agents. All these chemicals and other chemicals are dumped into rivers and cause water pollution and diseases among citizens. Another major factor in water pollution is synthetic fibers and the microplastics in them. When the textiles with synthetic fibers are washed, like nylon, the microplastics in them stay in the wash water. This creates a huge problem for rural areas who wash their clothes in rivers which can also be a water source for people.

**Major Parties Involved and Their Views**

### UN Alliance on Sustainable Fashion:

UN Alliance on Sustainable Fashion is an alliance consisting of members such as but not limited to UNDP (United Nations Development Programme), UN Environment, UNECE (United Nations Economic Commission for Europe). This alliance launched in 2019 has the goal of integrating the Sustainable Development Goals into the textile industry by introducing and raising awareness about sustainable fashion. UN Alliance on Sustainable Fashion aims to solve both the social and environmental issues in the textile industry.

Bangladesh:

The textile industry is one of the biggest in Bangladesh. In 2012 it was 83% of the countries exports. The reason for this is that the textile goods made in Bangladesh are sold for very cheap prices worldwide. However, the magnitude of this industry has both social effects such as poor working conditions and environmental effects. The industrial pollution makes up 60% of the water pollution in Dhaka watershed area. There are 719 factories related to the fashion industry that pouring their chemicals into rivers, which is the main drinking water source for citizens. Bangladesh has a law, which enforces factories to an effluent treatment plant, but the Bangladesh government has not been efficient in enforcing this law. As the Department of Environment checks the factories once in three months, most factories know in advance when they will be checked and can prepare for the inspections. NGOs and UN agencies have been trying to work with the private sector directly in recent years as some governments have failed to create sufficient regulations on this issue.

India:

India’s economic growth is due to the textile industry in the country. However, like the textile industry in Bangladesh, the textile industry in India also is a major factor in water pollution. The factories have been found to dump their wash water into rivers near cities and villages which causes the soil near these rivers, and the rivers themselves. Because of this, the productivity of the soil decreases and the entire ecosystems in the rivers disappear. Furthermore, civilians living near these rivers have been found to have some health problems such as but not limited to hemorrhages, ulceration of the skin. Researchers say that without further research it is impossible to determine a solution.

China:

China has one of the worst air pollutions in the entire world. A senior project manager from NRDC has stated that 1.715 million tons of carbon dioxide have been emitted from China in the year 2018. That is around 5% of the global total carbon dioxide emitted. China’s Ministry of Environment has also announced that 1.84 billion tons of toxic water from factories has been released into the environment. In 2013 China declared a war on pollution and changed its laws regarding the environment. Since 2014 China has released multiple laws regarding the enforcement of regulations, transparency, and the Parris accords. Since these laws, pollution in China has been decreasing. However, this decrease has been happening at a very slow rate and the Chinese government is trying to increase this rate.

### **Timeline of Events**

|  |  |
| --- | --- |
| **Date** | **Event** |
|  |  |
| 2009 | NRDC launches Clean By Design campaign in order to work with big textile companies. |
| July 2011 | Greenpeace launched the Detox campaign in order to work with big textile companies |
| 2013 | China declares war on pollution, promising to decrease pollution rates in China. |
| 2019 | UN Alliance on Sustainable Fashion is launched by several UN programs and funds. |

### 

### **Evaluation of Previous Attempts to Resolve the Issue**

Unfortunately, the United Nations has failed to pass any resolutions about this issue. However, most Member States have their own regulations about textile factories. For example, the Bangladesh government has a law that requires the textile factories to put effluent treatment plant in every factory. Yet, without the international regulations, some Member States fail to enforce these laws. NGOs and the UN have launched some campaigns to solve this issue but without the full support from the governments and the private sector, they can’t fulfill their mission.

### **Possible Solutions**

The Member States should work with big textile factories and big companies in the textile industry to create initiatives like Clean By Design, launched by the NRDC and Detox campaign, launched by Greenpeace, in order to get the help of the private sector in this vital issue. The Member States should also try to create international standards for the greenhouse gasses emitted from these factories and putting regulations to the disposal of wash water from factories. The lack of international standards for factories is one of the biggest reasons for this issue. The Member States should also try to make sustainable fashion more popular by raising the public’s awareness about the topic and try to stir citizens from fast fashion culture.

**Further Reading**

### A map that shows the companies that contribute to air and water pollution in China (<http://wwwen.ipe.org.cn/MapBrand/Brand.html?q=6>)

* A website that shows top 10 air polluted countries in the world (https://aqicn.org/rankings/)

**Bibliography**

“About Us.” *NRDC*, 7 May 2019, www.nrdc.org/about.

AlterNet. “Fast Fashion Is the Second Dirtiest Industry in the World, Next to Big Oil.” *EcoWatch*, EcoWatch, 1 Apr. 2019, www.ecowatch.com/fast-fashion-is-the-second-dirtiest-industry-in-the-world-next-to-big--1882083445.html.

“Feature: Tackling Hazardous Chemicals in the Textiles Supply Chain.” *Chemical Watch*, chemicalwatch.com/80723/feature-tackling-hazardous-chemicals-in-the-textiles-supply-chain.

Gibaja, Miriam Peralta. “How Polluting Is the Fashion Industry?” *EKOenergy*, 26 July 2019, www.ekoenergy.org/how-polluting-is-the-fashion-industry/.

Greenpeace International. “Detox My Fashion.” *Greenpeace International*, www.greenpeace.org/international/act/detox/.

Greenpeace International. “Greenpeace.” *Greenpeace International*, 31 July 2019, www.greenpeace.org/international/explore/about/.

Greer, Linda, et al. “Encourage Textile Manufacturers to Reduce Pollution.” *NRDC*, 16 June 2017, www.nrdc.org/issues/encourage-textile-manufacturers-reduce-pollution.

Group, SgT. “China Environmental Policy and the Textile Industry in 2018.” *SgT Group*, www.sgtgroup.net/textile-quality-management-blog/china-environmental-policy.

“Home.” *The UN Alliance for Sustainable Fashion*, unfashionalliance.org/.

“How Dialogue Is Shifting Bangladesh's Textile Industry from Pollution Problem to Pollution Solution.” *World Bank*, www.worldbank.org/en/news/feature/2017/02/15/how-dialogue-is-shifting-bangladeshs-textile-industry-from-pollution-problem-to-pollution-solution.

“Indian Textile Wastewater: The Environmental Hazards It Causes.” *De Gruyter Science Discoveries*, 30 Oct. 2018, sciencediscoveries.degruyter.com/indian-textile-wastewater-environmental-hazard-impacts-solutions/.

Kjellstrom, Tord. “Air and Water Pollution: Burden and Strategies for Control.” *Disease Control Priorities in Developing Countries. 2nd Edition.*, U.S. National Library of Medicine, 1 Jan. 1970, www.ncbi.nlm.nih.gov/books/NBK11769/.

Lu, Sheng. “WTO Reports World Textile and Apparel Trade in 2017.” *FASH455 Global Apparel & Textile Trade and Sourcing*, 16 Aug. 2019, shenglufashion.com/2018/08/16/wto-reports-world-textile-and-apparel-trade-in-2017/.

Nathanson, Jerry A. “Water Pollution.” *Encyclopædia Britannica*, Encyclopædia Britannica, Inc., 24 May 2019, www.britannica.com/science/water-pollution.

“Overview of Greenhouse Gases.” *EPA*, Environmental Protection Agency, 11 Apr. 2019, www.epa.gov/ghgemissions/overview-greenhouse-gases.

Preuss, Simone. “UN Launches Alliance for Sustainable Fashion.” *Fashionunited*, Fashionunited, 20 Nov. 2019, fashionunited.uk/news/business/un-launches-alliance-for-sustainable-fashion/2019031842190.

Ravelo, Jenny Lei. “Mapping the Environmental Impacts of China's Textile Industry.” *Devex*, Devex, 18 Jan. 2018, www.devex.com/news/mapping-the-environmental-impacts-of-china-s-textile-industry-91905.

Resnick, Brian. “More than Ever, Our Clothes Are Made of Plastic. Just Washing Them Can Pollute the Oceans.” *Vox*, Vox, 11 Jan. 2019, www.vox.com/the-goods/2018/9/19/17800654/clothes-plastic-pollution-polyester-washing-machine.

Rogers, Karen. “What Kinds of Pollution Do Textile Factories Give Off?” *Small Business - Chron.com*, Chron.com, 21 Nov. 2017, smallbusiness.chron.com/kinds-pollution-textile-factories-give-off-77282.html.

Sakamoto, Maiko, et al. “Water Pollution and the Textile Industry in Bangladesh: Flawed Corporate Practices or Restrictive Opportunities?” *Sustainability*, vol. 11, no. 7, 2019, p. 1951., doi:10.3390/su11071951.

“Textile Market Size & Share: Industry Research Report, 2019-2025.” *Textile Market Size & Share | Industry Research Report, 2019-2025*, www.grandviewresearch.com/industry-analysis/textile-market.

Tiezzi, Shannon. “Is China Winning Its War on Pollution?” *– The Diplomat*, For The Diplomat, 4 July 2019, thediplomat.com/2019/07/is-china-winning-its-war-on-pollution/.

Truents. “Manmade Synthetic Fibres.” *Textile School*, 1 Nov. 2018, www.textileschool.com/456/manmade-synthetic-fibres/.

“What Is Air Pollution: Environmental Pollution Centers.” *What Is Air Pollution | Environmental Pollution Centers*, www.environmentalpollutioncenters.org/air/.

www.fibre2fashion.com. “Pollution by Textile Industry - Pollutants of Water, Air, Land, Environmental Pollution By Textile Industry.” *Fibre2Fashion*, www.fibre2fashion.com/industry-article/6262/various-pollutants-released-into-environment-by-textile-industry.