

# FACILITATING A CIRCULAR ECONOMY FOR TEXTILES

## The Environmental Impacts of the Fiber, Textiles, and Clothing (FTC) Industry

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# Fast Fashion Facts

Globally, 80-100 billion garments are produced every year.

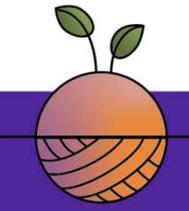
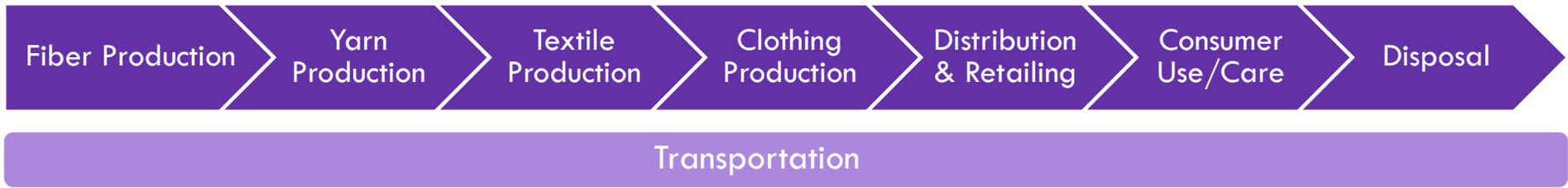
The FTC industry is producing 400% more clothes compared to 20 years ago.

On average, consumers wear a garment seven times before getting rid of it.

Most women only wear 20-30% of the garments in their wardrobes.

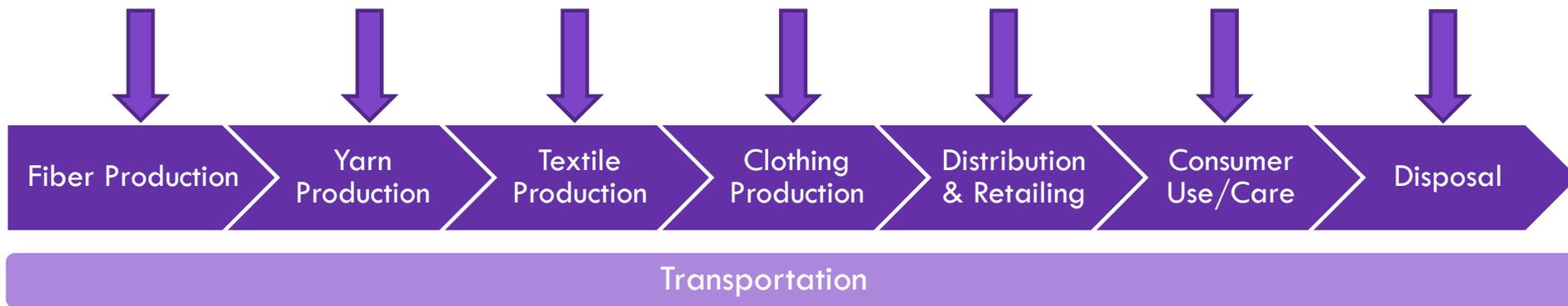


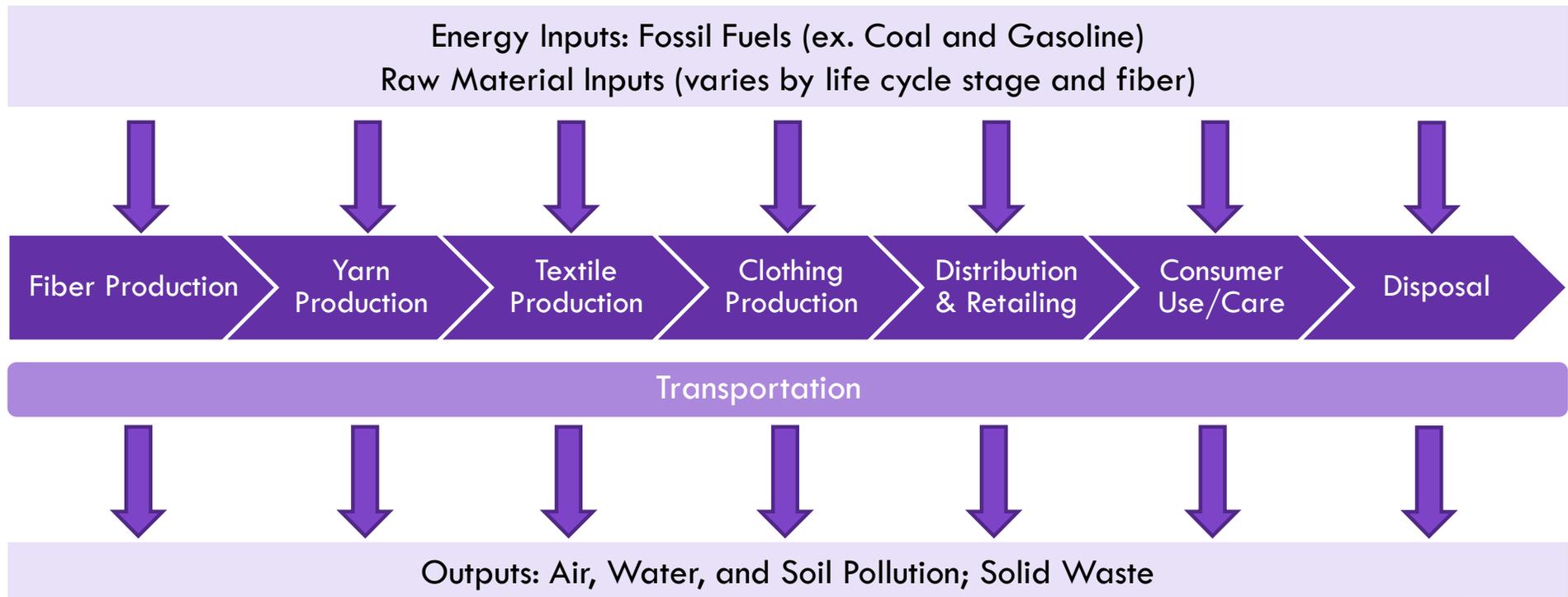






Energy Inputs: Fossil Fuels (ex. Coal and Gasoline)  
Raw Material Inputs (varies by life cycle stage and fiber)







Water  
Consumption



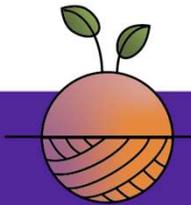
Water  
Pollution



Solid Waste



Greenhouse  
Gas Emissions





# FTC and Water Consumption



# The Aral Sea Basin



1985



# The Aral Sea Today

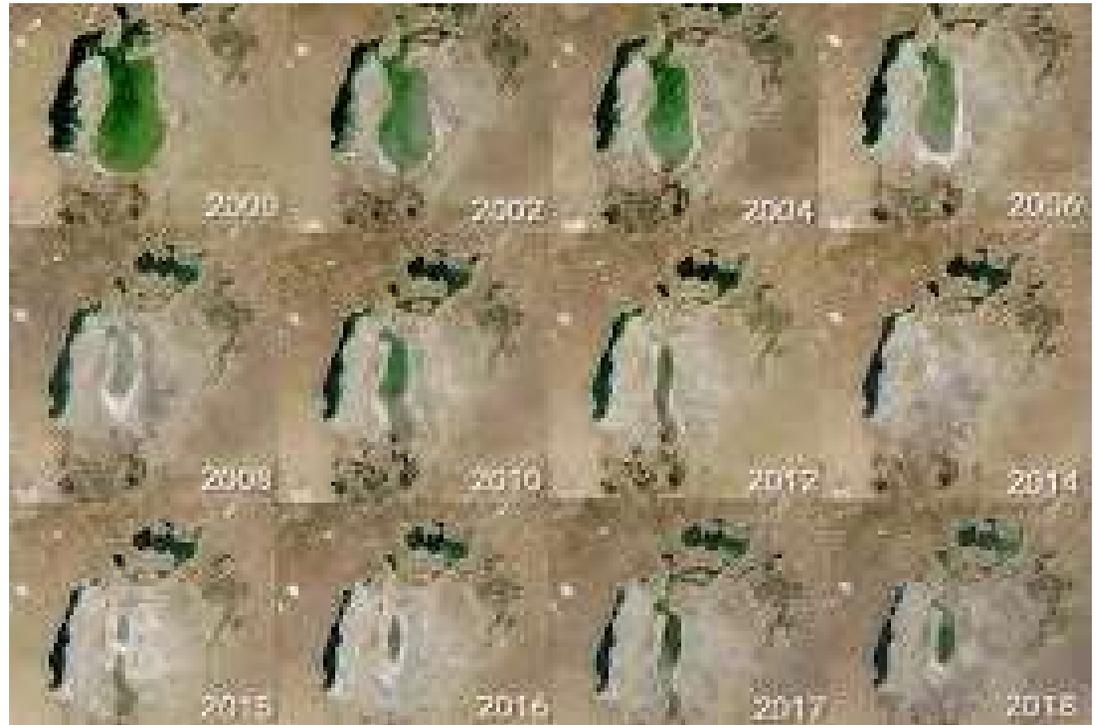


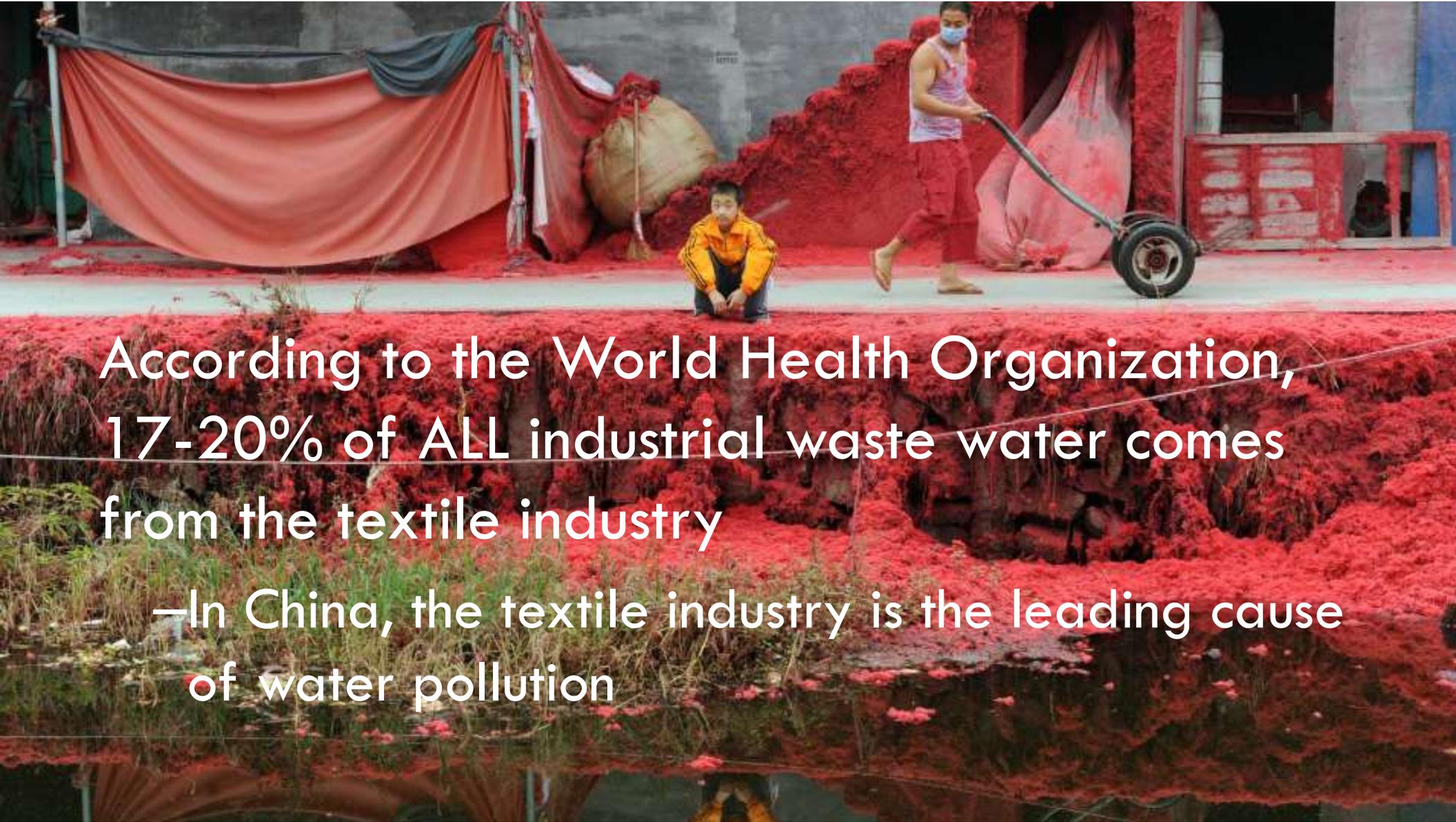
Image Source: NASA. (2018). *World of change: The shrinking Aral Sea.*  
Available at <https://earthobservatory.nasa.gov/features/videos/shrinking-aral-sea>



An aerial photograph showing a river with a distinct orange-brown color, indicating sediment pollution. The river flows through a landscape with green trees on the left and a large, flat, orange-brown area on the right. The text "FTC and Water Pollution" is overlaid in a white banner across the middle of the image.

# FTC and Water Pollution





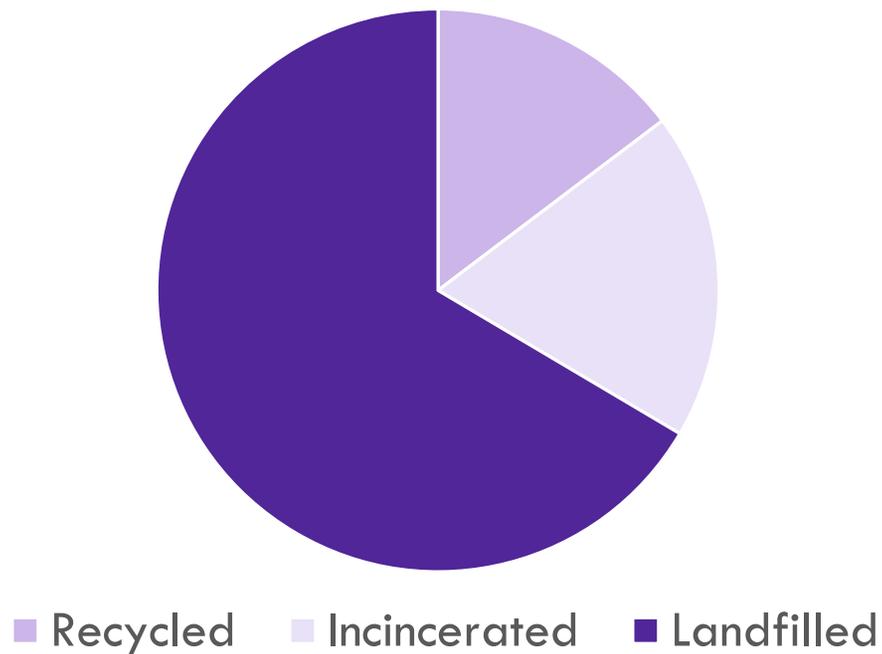
According to the World Health Organization,  
17-20% of ALL industrial waste water comes  
from the textile industry

—In China, the textile industry is the leading cause  
of water pollution



# FTC and Waste Generation

## Textile Municipal Solid Waste in the US



Nearly 100% of textiles and clothing are recyclable.

Only 15% of consumer-used clothing is recycled.

17 million tons of textile waste is generated in the US every year.





# US Textile Waste Management



Source: <https://www.epa.gov/facts-and-figures-about-materials-waste-and-recycling/textiles-material-specific-data>



# FTC and GHG Emissions



# Consider This

The primary energy source within the FTC industry remains fossil fuels.

Annually the FTC industry consumes 1 trillion kw hours of electricity.

Greenhouse gas emissions from textile production total 1.2 billion tons of CO<sub>2</sub> equivalent.

FTC emissions are projected to increase more than 60% by 2030.





*flint hills*

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