

SUSTAINABLE APPROACHES TO REDUCE CARBON FOOTPRINT IN TEXTILE PROCESSING INDUSTRY

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ABSTRACT

Carbon Footprints are the amount of the carbon dioxide which is generated and released by an activity of any individual, community or industry. The apparel and textile processing industry is one of the largest industry which generates Green House Gases like Carbon Dioxide, Methane, Nitrous Oxide and Fluorocarbons and accounts for a significant amount of Carbon Footprint leading to global warming.

The US Energy Information Administration data reveals that the Textile industry is the 5th biggest and major contributor to CO₂emissions. So is the Indian Textile Industry, currently estimated US\$150 billion and expecting to reach US\$250billion by 2020 will be a major contributor of carbon footprint.

To achieve this target, huge amounts of water and fuel (to generate electricity, steam and transportation) is required. This will directly contribute to enhance carbon footprint. Beside this, there will be requirements of huge quantity of dyes, chemical and auxiliaries, which further increase effluent load. The huge amount of fossil fuel consumed during processing of textiles having carbon content results in acidification, fossil fuel depletion and results in global warming that again leads to carbon footprint generation.

Therefore, to combat this alarming situation of environmental pollution and to reduce carbon footprints the textile industry needs to incorporate sustainable approach

The carbon footprints can be reduced during the whole textile processing due to minimum water consumption, reducing m:l ratio, using sustainable chemicals, and moving towards a green gas instead of coals, recycling of water, solar energy etc.

This paper suggests some sustainable approaches which can be used to reduce the carbon footprints during the whole textile wet processing.

KEYWORDS: *Carbon Footprints, Carbon Dioxide, Greenhouse Effect, Sustainable Approach & Textile Industry*

Received: Jun 02, 2020; Accepted: Jun 22, 2020; Published: Aug 03, 2020; Paper Id.: IJTFTAUG20206