

Social Ecological Resilience to River Floods and Coastal Disasters

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The Water In Industrial Production And The Potential Of Environmental Sustainability Of The Metalmechanical And Catarinian Textile Sectors In The Light Of Green Gdp

The Green GDP created by the UN in 2012 and announced during the Rio + 20 conference, has a focus and a proposal related to the use and depletion of natural resources in production, which in the case of this study focuses on water. Its purpose is to excel in the efficiency of production processes aiming at sustainable long-term economic reproduction. The formula for calculating the Green GDP follows.

$$\text{GDP Green} = \text{Industrial GDP} - (\text{Depletion of mineral resources} + \text{Cost of controlling environmental degradation})$$

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The world availability of water follows the following ratio (CASAN, 2017, s / p):

97.30% - Oceans.

2.34% - Ice.

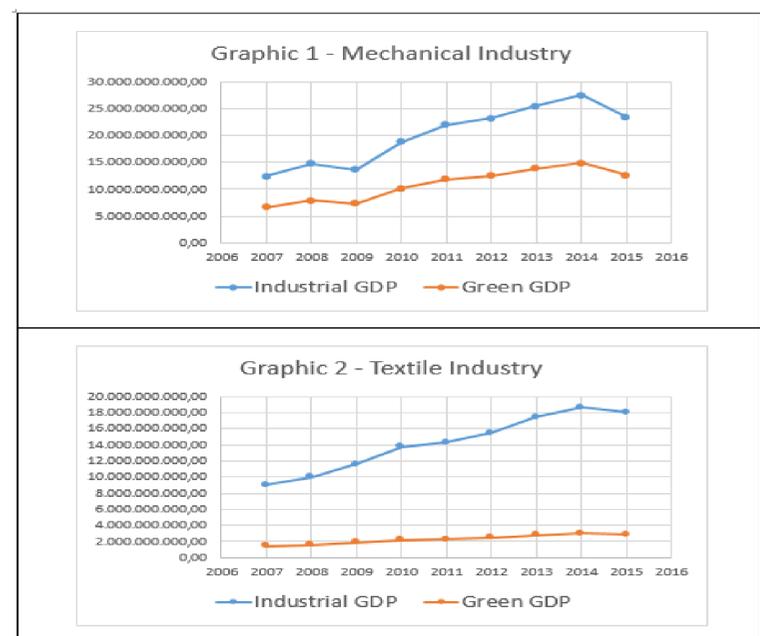
0.36% - Rivers, lakes and swamps. This is the water we can use. Of this 0.36%, we divide the consumption like this:

80% of this water - agriculture

15% of this water - industry

5% of this water - human consumption

Brazil is the country with the most fresh water in the world. The Brazilian water availability is 91.2 million liters per second. [...] The Amazon River Basin is the most extensive hydrographic network on the planet. Through it, 20% of the surface fresh waters of the world run (SENADO, 2015, page 12).



The textile sector has a lower sustainability potential than the metal-mechanical sector (GRAPHICS 1-2). However, both sectors present a loss of sustainability.

It is important to note that the calculation of the formula did not take into account investments made in new technologies that make it possible to minimize water consumption, such as rainwater harvesting and water reuse in the production process.

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