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## Corporate Water Stewardship through Water Neutrality: A Case Study on the First Waterneutral® Apparel Factory in Asia

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## **Abstract**

'Water Neutrality' is a novel concept first coined by the Water Footprint Network. 'Water Neutral' means that one reduces the water footprint of an activity as much as reasonably possible and offsets the negative externalities of the remaining water footprint. This does not indicate water usage being reduced to zero, but rather demonstrates that the negative economic, social and environmental externalities are reduced as much as possible, and that the remaining impacts are fully compensated. Compensation may be in the form of monetary contributions toward a more sustainable and equitable use of water within the hydrological system where the adverse impacts of the remaining "water footprint" are distributed. Linea Aqua, a subsidiary of the MAS holding, and one of the leading swimwear manufacturers in Asia, has taken a leading role in water stewardship to become Asia's First Water Neutral® Apparel Factory. Linea Aqua's water foot print was calculated annually (2013-2016) according to the methodologies developed by Water Footprint Network to quantify the impact to the water cycle of the surrounding ecosystem. Mitigation measures were introduced to reduce the identified impacts. According to the Water Footprint assessments, the total factory's water intake has reduced by 5.9%. Daily water consumption per employee and per piece has reduced by 11.4% and 40.3% respectively when compared with the 2013 baseline. The factory has reduced the waste water discharge by 57%. Treated waste water reuse for flushing and gardening has increased by 39.8% when compared with the year 2014. Total 28% reduction of water intake was estimated with the installation of a Reverse Osmosis plant to recover waste water to reuse in cooling towers in the factory. Considering all the water savings, the total water recovery is 43.98% of the total water consumption. The balance saving of 32,990.12 m<sup>3</sup>/year has been achieved through the reasonable investment on preidentified water replenishing projects on conservation or restoration of water quantity or quality within and outside of the affected water catchment. The overall reasonable investment for the replenish benefits as a function of cost share is Rs.14.00 million (2014-2016).

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