



Water sustainability policies and Implementation

Date: 25/02/16



Policy Statement Extract

Clover is a branded food and beverages group with a strong emphasis on value-added products. The company has operations in South Africa and selected African countries. Part of the company's vision is to deliver trusted products and sustainable shareholder value by being a responsible corporate citizen and preferred employer.

As part of achieving this vision, Clover recognises its responsibility to reduce, and as far as practicable, to eliminate the impacts of its business on the environment. This responsibility relates not only to operations within Clover's control, but also to Clover's supply chain partners, which are recognised to be responsible for significant environmental impacts in supplying Clover.



Clover Water Consumption

We use water to (just a few):

1. Cleaning factory pipelines and equipment
2. Flushing product (improving product yield)
3. Steam generation and evaporative cooling (condensers, etc.)
4. Product ingredient in juices, etc. or as packed water
5. General cleaning and hygiene
6. Etc.



Water sustainability policy

- **Monitoring water usage across its operations, and setting of targets for reducing water consumption.**
 - Measuring and monitoring framework
 - Grey Water utilisation/optimisation
 - Recycling/Re-use
 - Improving water effectivity in packed mineral water



Water sustainability policy implementation

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- **Measuring and monitoring framework**
 - Defined accountability and targets at every level
 - Performance management and bonus alignment
 - Visual reporting and problem solving at per shift basis



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- **Grey Water utilisation/optimisation**
 - Understanding water footprint for each site
 - Using fresh water only for quality critical applications.
 - Process Control to ensure only exact requirement is used.
 - Also important to reduce energy consumption of water reticulation with optimised control systems
 - Grey water for utility and non-critical applications
 - Less polluted sources first
 - Purified according to needs of the application (boilers, cooling towers, etc.)



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- **Recycling/Re-use**
 - Using lightly polluted water for heavy polluting applications
 - Process Control to ensure only exact requirement is used.



Water sustainability policy

- **Implementation of programmes to minimise the generation of solid and liquid wastes and the impacts of their disposal.**
 - Minimising effluent volume
 - Improving effluent quality
 - Reducing trade returns
 - Recycling/Re-use – Eliminate waste to landfill



Water sustainability policy implementation

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 - Minimising effluent volume
 - Improving effluent quality
 - Reducing trade returns
 - Recycling/Re-use – Eliminate waste to landfill
- **Improving effluent quality**
 - Understanding effluent pollution per site
 - Reducing product loss/waste – especially fats/sugars
 - Reducing cleaning chemical consumption
 - Process control optimisation is key
 - Real time monitoring and visibility is not optional



Water sustainability policy

- **Achieving security of supply .**
 - Optimised water storage
 - Quality assurance and control
 - Minimising water purchases



Water sustainability policy implementation

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 - Minimising water purchases
- **Quality assurance and control**
 - Storage provision ensuring continuity of supply
 - Buffer water to ensure water meets specifications before use
 - Correct filtering and treatment per application
 - Salts, foreign objects and bacteria



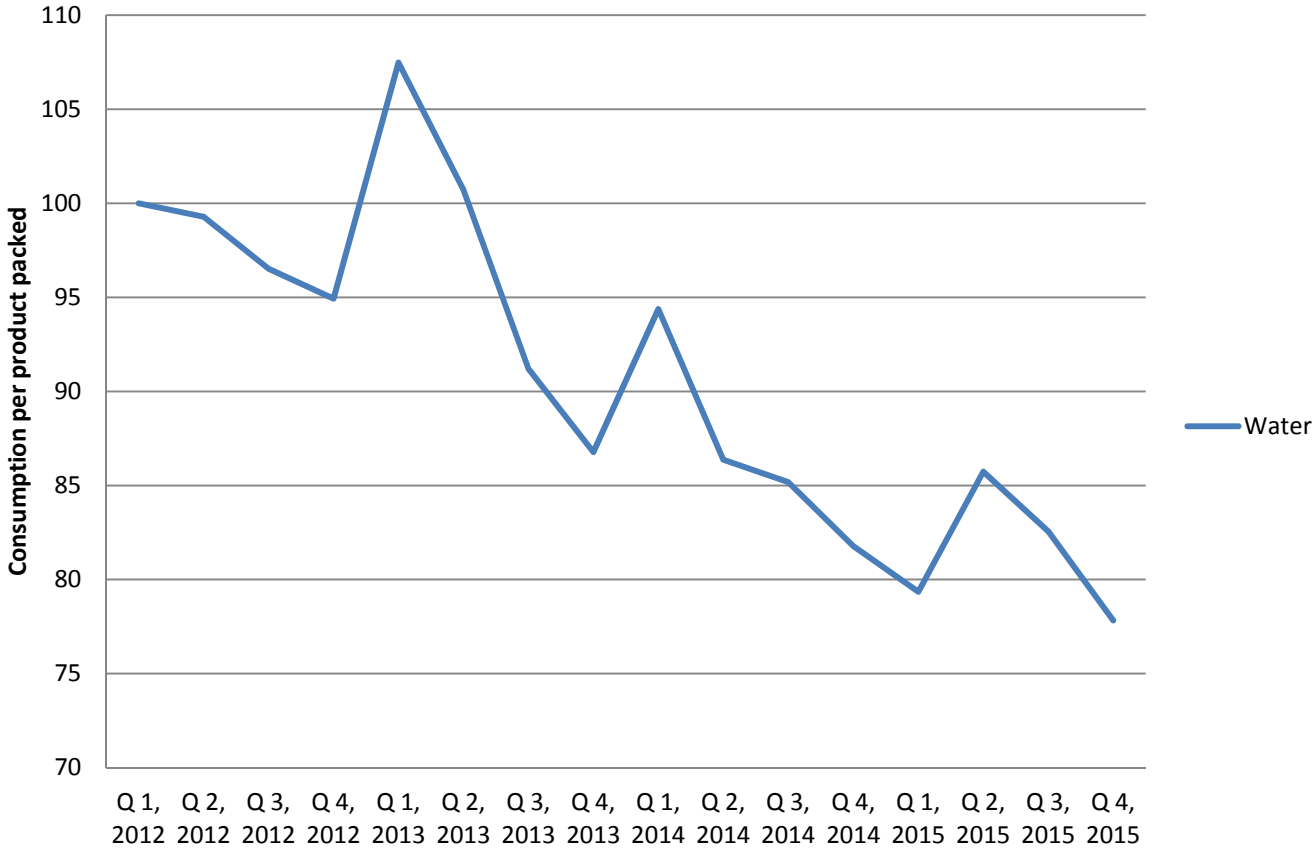
Some Results:



Environmental Performance - Water

1. *Water consumption has reduced significantly on average during a three year period – 28 % reduction*

Water consumption intensity





**THANK
YOU**