

**BJC**

Berli Jucker Public Company Limited

บริษัท เบอริส์ ยุคเกอร์ จำกัด (มหาชน)

<b>Water Use Assessment Report</b>	<b>Support answer: 2.5 Water</b>
	<b>Topic: Water Use Assessment</b>
	<b>Report Year: 2023</b>

Currently, the global water crisis has led to reduced water availability, lack of access to clean water, and widespread water pollution in several countries. Both the public and government sectors worldwide are adapting and preparing to address these issues by integrating water management methods into their operations. Effective water management is crucial for organizations to survive and thrive amid the water crisis.

To address these challenges, water management should be systematic and consistent across the organization. This approach enables easier analysis, planning, and resolution of water resource issues, aligning with the long-term goal of reducing water consumption by 15% per revenue by 2032 for Berli Jucker Public Company Limited and its Group of Companies (BJC).

Effective management of wastewater treatment systems is crucial for any company involved in industrial processes. Not only does it ensure environmental sustainability, but it also helps the company comply with legal regulations and Water use assessment is a key process that helps identify opportunities for improving water efficiency.

### **Thai Beverage Can (TBC)**

Thai Beverage Can (TBC) has received certification for the Water Footprint of Product. The Water Footprint is an environmental tool that assesses both the direct and indirect water consumption of a product, typically measured in units of water used per unit of product. The evaluation follows the ISO 14046 standard, which is based on the principles of Life Cycle Assessment (LCA) covering the entire lifecycle of a product—from raw material acquisition through production, use, and disposal.

The benefits of Water Footprint assessment include understanding the total water usage and the impact on water quality, identifying water needs throughout the production process, and pinpointing hot spots for water use within the company. This information helps TBC develop strategies to reduce water consumption and improve water use efficiency.

TBC has received certification from The Federation of Thai Industries for the Water Footprint of its aluminum cans with various lids and capacities:

- Aluminum cans with regular lids, 330 milliliters

**BJC**

Berli Jucker Public Company Limited

บริษัท เบอริส์ ยูคเกอร์ จำกัด (มหาชน)

<b>Water Use Assessment Report</b>	<b>Support answer: 2.5 Water</b>
	<b>Topic: Water Use Assessment</b>
	<b>Report Year: 2023</b>

- Aluminum cans with sleek lids, 250 and 330 milliliters
- Aluminum cans with slim lids, 180, 190, and 250 milliliters
- Aluminum cans with stubby lids, 250 milliliters

Each evaluation falls under the B2B evaluation scope.

<b>Types of Products Certified for Water Footprint of Product</b>	<b>Page</b>
Aluminum cans with regular lids 330 ml	8
Aluminum cans with sleek lids 250 ml	9
Aluminum cans with sleek lids 330 ml	10
Aluminum cans with lids slim size 180 ml	11
Aluminum cans with lids slim size 190 ml	12
Aluminum cans with lids slim size 250 ml	13
Aluminum cans with stubby lids size 250 ml	14

### **Rubia Industries (RIL)**

Rubia Industries (RIL) has implemented a water use assessment focusing on water reuse in its soap production processes. Specifically, RIL has incorporated water reuse in the wet scrubber and cooling tower systems. In 2023, the total amount of water reused amounted to 14,847 cubic meters, as illustrated in the picture below.



**BJC**

Berli Jucker Public Company Limited

บริษัท เบอร์ลี ยุคเกอร์ จำกัด (มหาชน)

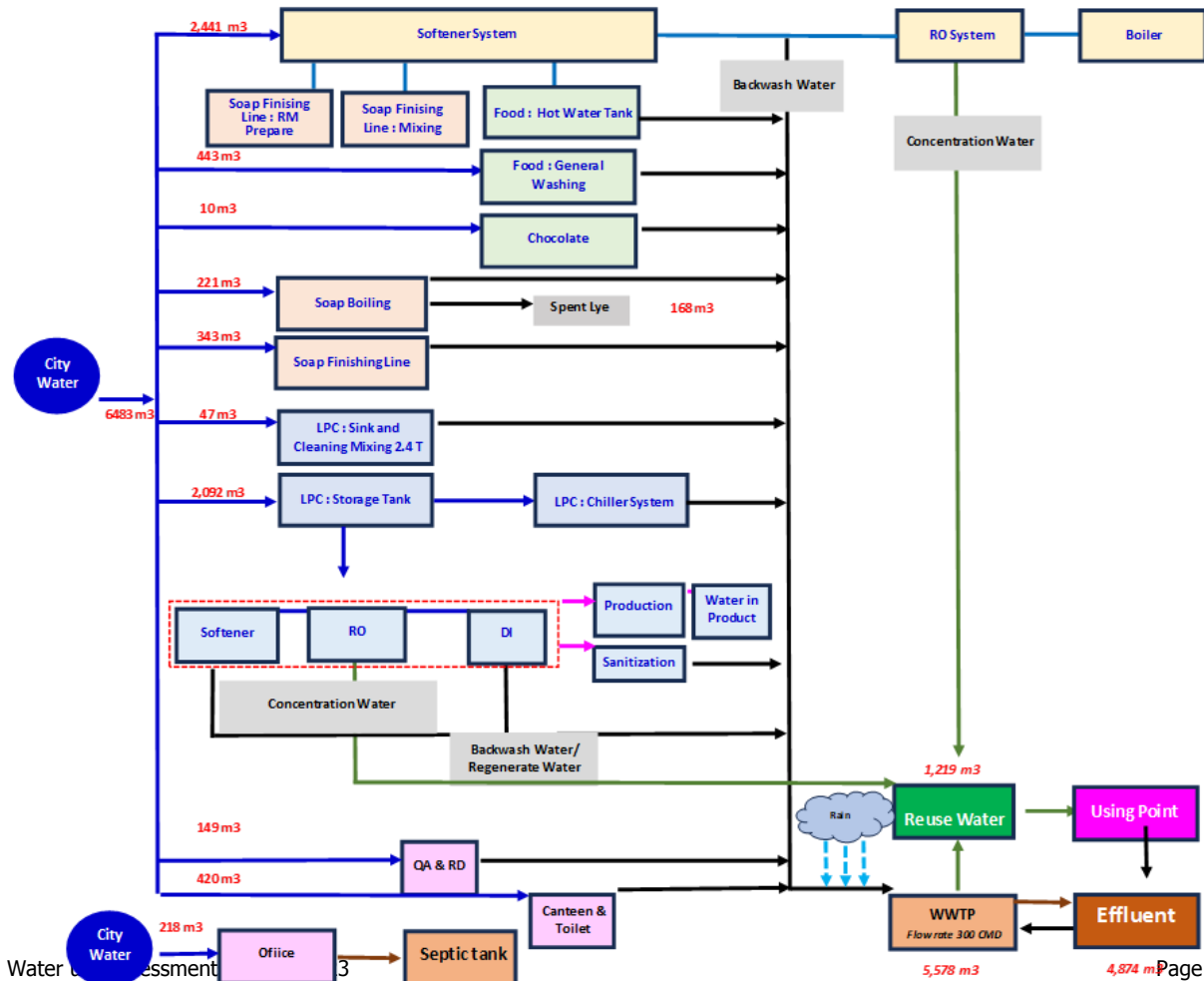
**Water Use Assessment Report**

**Support answer: 2.5 Water**

**Topic: Water Use Assessment**

**Report Year: 2023**

**RIL Water Balance**





**BJC**

Berli Jucker Public Company Limited

บริษัท เบอร์ลี่ ยุคเกอร์ จำกัด (มหาชน)

**Water Use Assessment Report**

**Support answer: 2.5 Water**

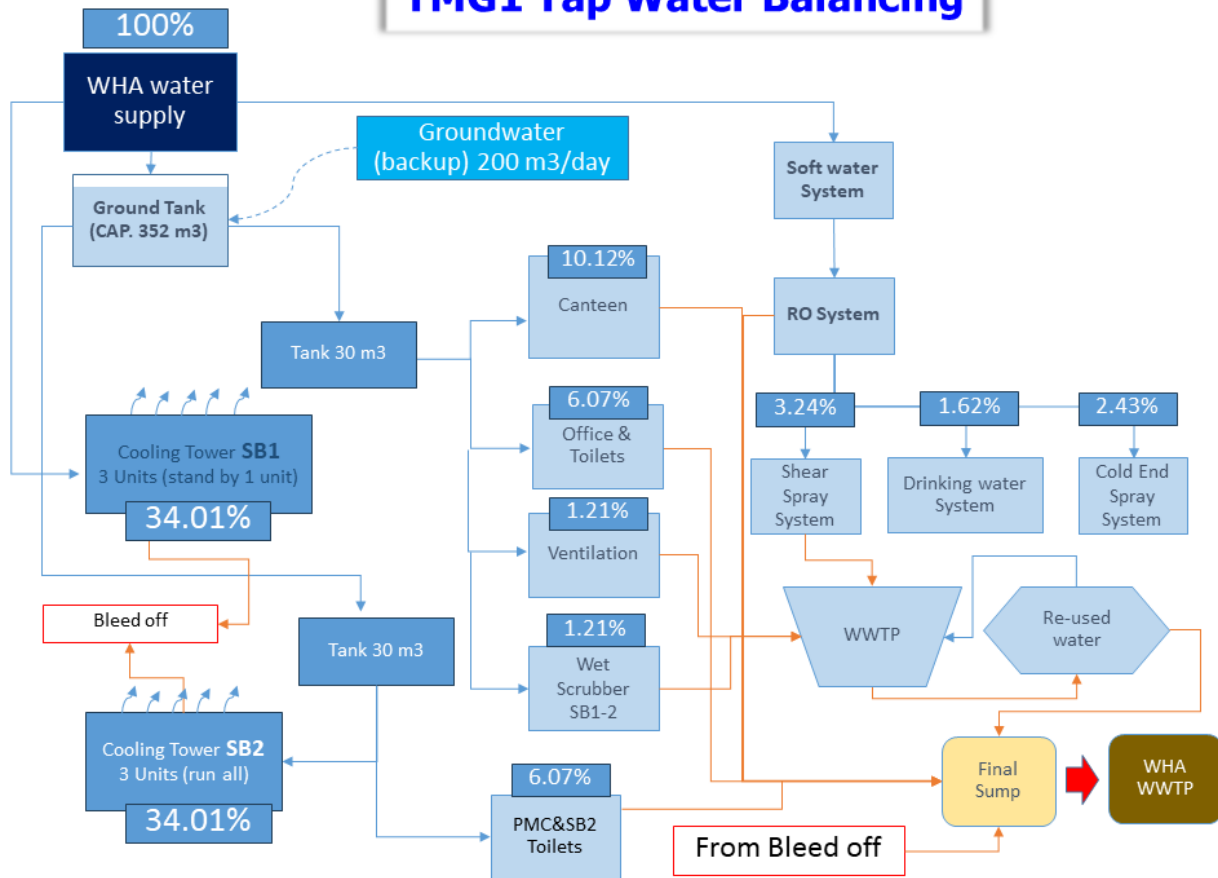
**Topic: Water Use Assessment**

**Report Year: 2023**

**Thai Malaya Glass (TMG)**

Thai Malaya Glass (TMG) has conducted a water use assessment for both TMG1 and TMG2 facilities. Both facilities have integrated water reuse systems into their production processes. The details of their water reuse practices are depicted in the picture below.

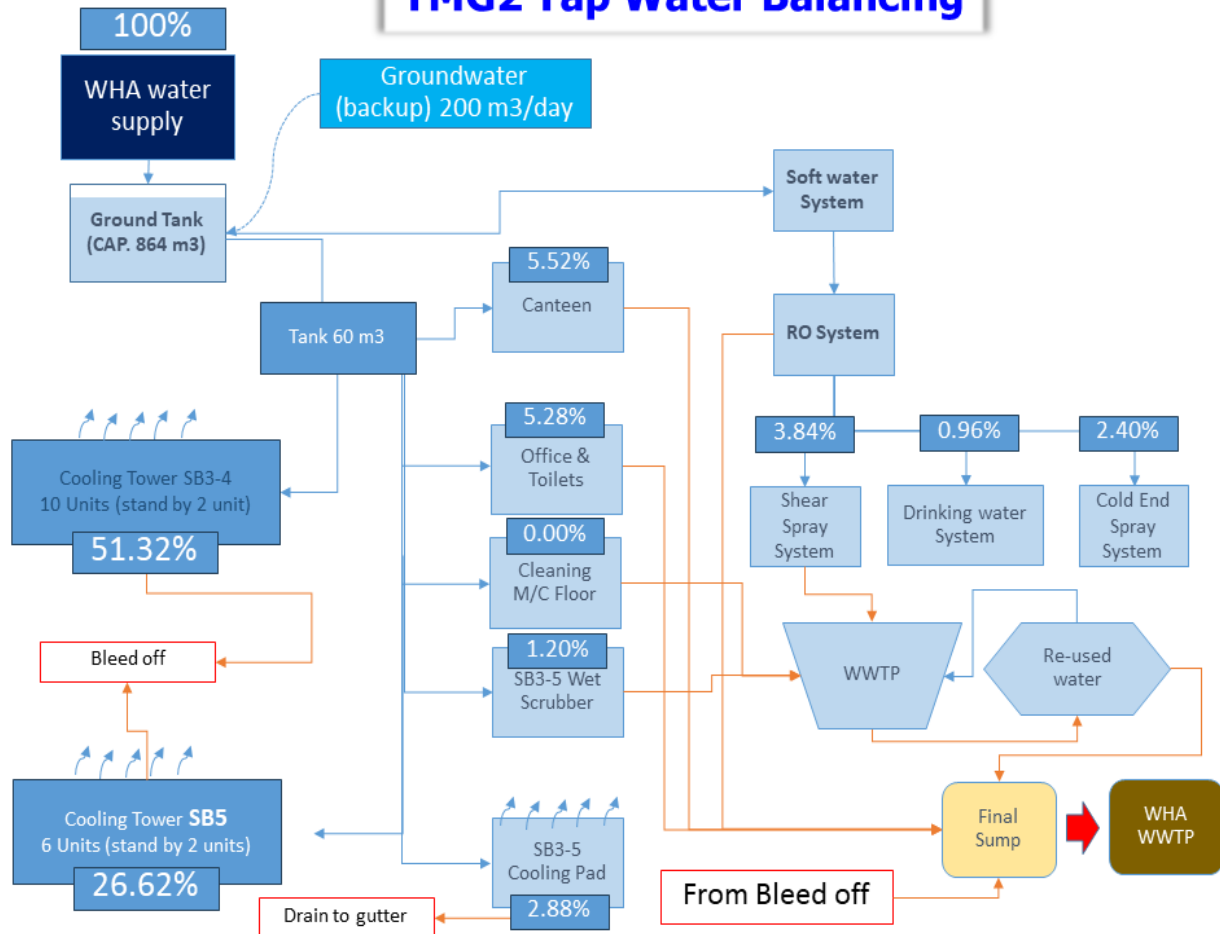
**TMG1 Tap Water Balancing**





<b>Water Use Assessment Report</b>	<b>Support answer: 2.5 Water</b>
	<b>Topic: Water Use Assessment</b>
	<b>Report Year: 2023</b>

### TMG2 Tap Water Balancing



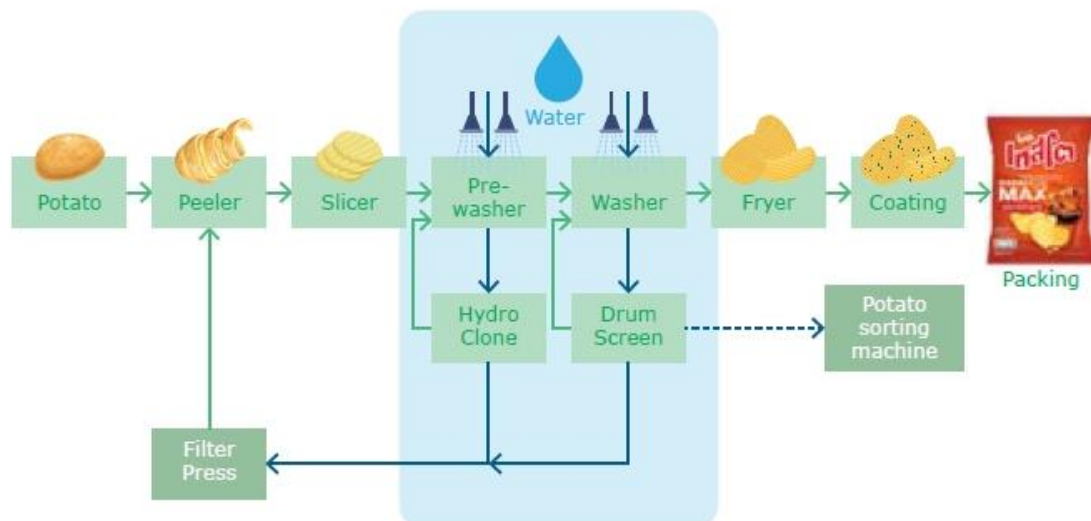
<b>Water Use Assessment Report</b>	<b>Support answer: 2.5 Water</b>
	<b>Topic: Water Use Assessment</b>
	<b>Report Year: 2023</b>

### Thai Glass Industries (TGI)

Thai Glass Industries (TGI) has implemented an Automated Water Spray (AWS) system as part of its Water Spray process. This system uses treated wastewater to periodically spray water over the cullet, which helps to minimize dust and prevent any negative impact on surrounding communities. This initiative supports maintaining a positive relationship with the local community.

### Berli Jucker Food (BJF)

Berli Jucker Food (BJF) recognizes that water stress is a critical issue that must be efficiently managed. To address this, BJF has developed a system for the continuous circulation of water throughout its washing process. The water is filtered using a customized filter press system and drum screen, which removes large particles, dirt, and potato starch. This filtered water is then reused in the washing and peeling process to remove potato skins before frying.





**BJC**

Berli Jucker Public Company Limited

บริษัท เบอริส์ ยุคเกอร์ จำกัด (มหาชน)

<b>Water Use Assessment Report</b>	<b>Support answer: 2.5 Water</b>
	<b>Topic: Water Use Assessment</b>
	<b>Report Year: 2023</b>

The assessment conducted for Berli Jucker Public Company Limited (BJC) and its subsidiaries aimed to evaluate the current water usage patterns and identify opportunities for enhancing water efficiency across the organization. The key findings and recommendations are outlined below:

**Water Consumption Patterns:** The assessment revealed that water usage varies significantly across different facilities, with manufacturing plants and distribution centers being the highest consumers.

**Water Sources:** The primary sources of water include municipal supply, groundwater, and surface water. Dependence on these sources varies based on location and facility type.

**Water-Efficient: Fixtures and Equipment:** Upgrading to water-efficient fixtures, such as low-flow faucets and toilets, and investing in modern, water-saving manufacturing equipment can lead to substantial savings.

**Process Optimization:** In manufacturing processes, opportunities were identified to recycle and reuse water. Optimizing processes to minimize water usage without compromising quality is crucial.

**Employee Training and Awareness:** Educating employees about water conservation practices and involving them in water-saving initiatives can foster a culture of sustainability.

<b>Water Use Assessment Report</b>	<b>Support answer: 2.5 Water</b>
	<b>Topic: Water Use Assessment</b>
	<b>Report Year: 2023</b>

**Awareness Training Provided to Employees on Water Efficiency Management Programs**



To foster corporate-wide awareness, BJC provides regular training to employees on water efficiency management. These training sessions are designed to share knowledge about appropriate water management practices. Additionally, BJC regularly disseminates information on water management practices through corporate-wide E-news emails, keeping employees updated on effective water management strategies.