RICHA FASHION PRIVATE LIMITED

C-39, SECTOR-57, NOIDA, GAUTAM BUDDHA NAGAR, UTTAR PRADESH

WATER FOOTPRINT REPORT YEAR 2025

ABOUT THE REPORT

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INTRODUCTION

This report assesses the water footprint of Richa Fashion Pvt. Ltd., a garment manufacturing facility, in accordance with ISO 14046, Water Footprint Network (WFN) & WRI methodology.

The water footprint is categorized into:

- Blue Water Footprint (BWF): Consumption of surface and groundwater resources.
- Grey Water Footprint (GWF): Volume of water required to dilute pollutants to meet water quality standards.
- Green Water Footprint: Rainwater stored in soil and used by vegetation (mainly relevant to agriculture).

The assessment is based on the annual water consumption, reuse, and wastewater discharge data provided by the facility.

OBJECTIVE OF THE REPORT

Purpose and Objectives

- Evaluate the overall water footprint of facility operations.
- Identify opportunities to improve water efficiency and enhance water reuse.
- Support sustainable water management practices.
- Align with recognized frameworks including ISO 14046, ISO 46001, GRI 303, and CDP Water.

Scope and Boundaries

The assessment covers all operational activities within the Richa Fashion Pvt. Ltd. facility, including:

- Production and finishing operations
- Utility systems (boilers, RO systems) Domestic water use (drinking, sanitation, and facility cleaning)
- Administrative and support areas

Exclusions

- The following are excluded from the assessment boundary:
- Rainwater and stormwater drainage, unless captured and used as a resource.
- Water consumption from third-party suppliers or outsourced activities.

ABOUT THE ORGANIZATION

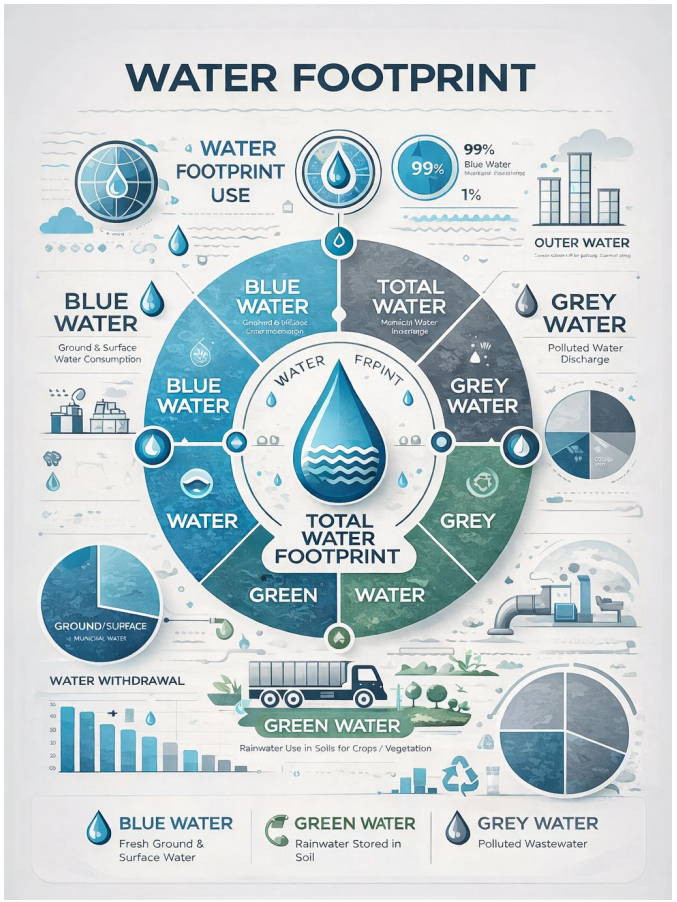
Established on March 10, 2011, Richa Fashion Private Limited is a leading export house specializing in the manufacturing and trading of fashion garments and accessories. Since its inception, the company has made a mark in the international market, particularly in the export of ladies' woven garments.

Its dedication to quality, excellence, and safety has played a key role in building a strong global reputation.

Guided by visionary management, the company continues to drive strategic growth and innovation in the industry.

The company emphasizes creating a comfortable work environment with a focus on health, safety, and sustainability.

ABOUT THE REPORT



This Water Footprint Report for Richa Fashion Pvt. Ltd., provides a detailed assessment of the organization's water consumption, usage patterns, and discharge processes. It follows globally recognized methodologies, including ISO 14046 and the Water Footprint Network (WFN), to categorize water usage into blue, green, and grey water footprints. WRI Aqueduct tool is used to understand the water stress of the area.

The report aims to identify opportunities for water conservation, efficiency improvements, and regulatory compliance. It includes a comprehensive water balance analysis, evaluates the impact of water withdrawals on local resources, and suggests sustainable water management strategies.

By understanding and optimizing water usage, the unit can work towards reducing its environmental footprint, enhancing operational sustainability, and aligning with global sustainability goals.

INTENDED USE & USERS OF THE REPORT

This report is a voluntary communication to various stakeholders of Richa Fashion Pvt. Ltd., including customers, management, investors, regulatory bodies, and the public. It aims to provide transparency on the company's water footprint and water balance, ensuring responsible water usage and sustainability. The report serves as a tool to monitor water consumption, recycling, and discharge, helping stakeholders track performance over time and establish a foundation for future water conservation and efficiency initiatives.

Management Details:

Mr. Pranav Verma | Director

Verifier: Mr. Rajiv Chaturvedi

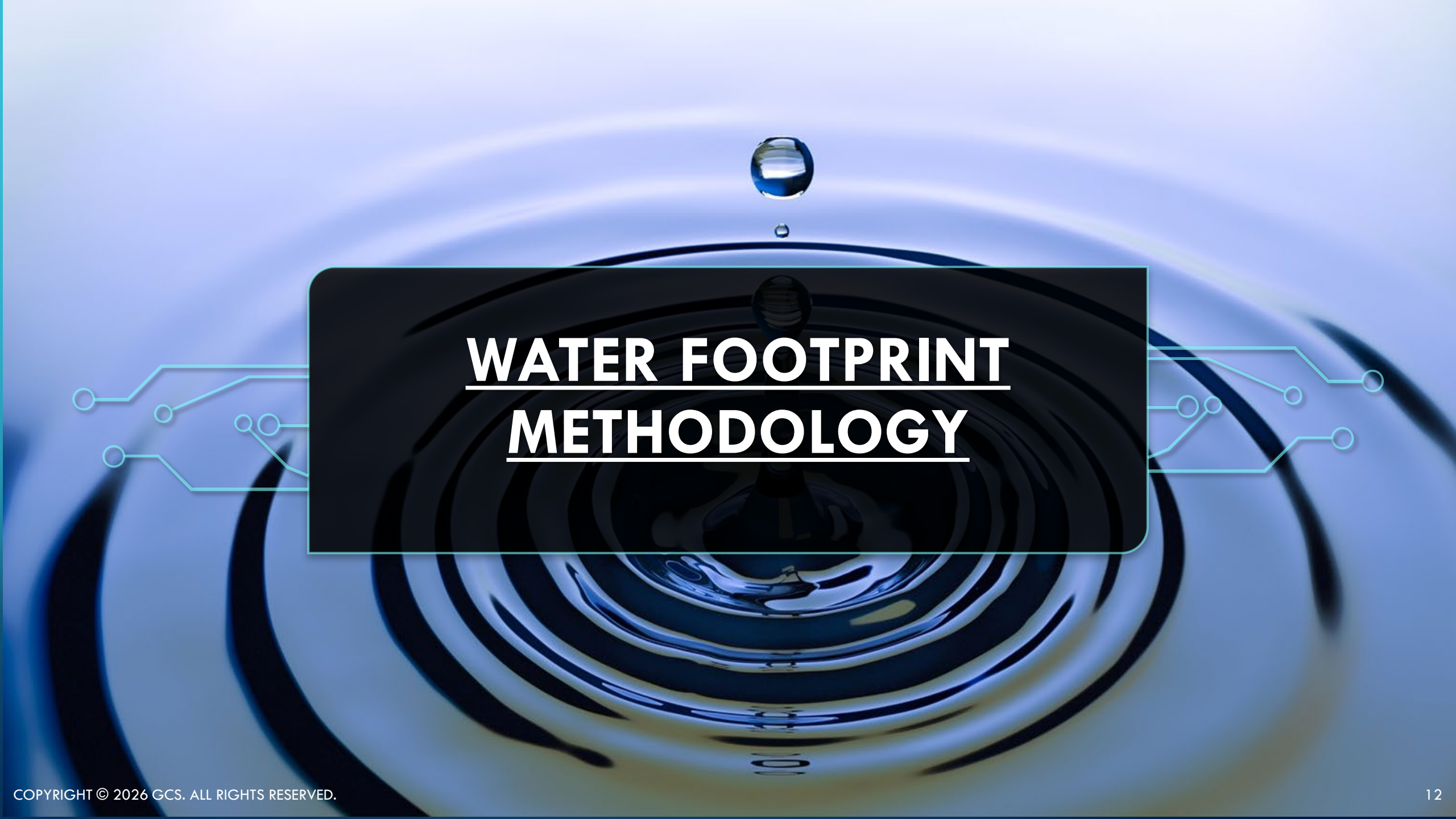
Verifier Certificate: ISO 14064-1, ISO 14064-2 & Water Auditor

Certificate No.: 117874925 / 165946641/ CERT _3669744_ 4

Issued by: SGS India Pvt. Ltd. & Indian Plumbing Association

Accounting & Reporting by:

Green Compliance Services



WATER FOOTPRINT METHODOLOGY

This report evaluates the water footprint of Richa Fashion Pvt. Ltd., a garment manufacturing unit, using the **ISO 14046 and Water Footprint Network (WFN)** methodologies.

The water footprint is categorized into **Blue Water Footprint (BWF), Grey Water Footprint (GWF), and Green Water Footprint (GWF)**. The assessment is based on the yearly water consumption and discharge data provided by the organization.

1. Standards Used:

- **ISO 14046** – Life Cycle Assessment-based approach
- **Water Footprint Network (WFN)** – Blue, Green, and Grey water assessment

2. Key Components of Water Footprint:

- **Blue Water** – Surface & groundwater consumption
- **Green Water** – Rainwater stored in soil & used by plants
- **Grey Water** – Water needed to dilute pollutants to meet quality standards

3. Data Collection:

Water intake records (borewell, municipal supply)

Water usage (industrial, domestic, cooling, washing)

Discharge data (ETP-treated, RO waste, municipal sewer)

Pollution concentration limits (BOD, COD, TSS)

4. Calculation Approach:

Water Balance Analysis: Ensuring input = output + losses

Blue, Green, and Grey Water Quantification

Impact Assessment & Efficiency Evaluation

5. Objective:

Optimize water usage & reduce footprint

Improve water efficiency in operations

Ensure regulatory compliance & sustainability

WATER FOOTPRINT CALCULATION & ANALYSIS

Water Footprint Type	Definition	Data Required	Methodology
Blue Water Footprint	Freshwater consumed from surface water (rivers, lakes) or groundwater sources.	Borewell/ municipal water intake	(ISO 14046/WFN)
		Wastewater discharge	
		RO & ETP treatment data	
Green Water Footprint	Rainwater used directly for production or absorbed by soil and plants.	Rainwater harvesting data	(ISO 14046/WFN)
		Crop/land area (for agriculture-related use)	
Grey Water Footprint	Freshwater required to dilute pollutants to safe environmental levels.	Effluent water quality data	(ISO 14046/WFN)
		Pollutant concentration limits	
		ETP discharge values	
Total Water Footprint	Overall freshwater impact of the organization.	Water intake & consumption records	(ISO 14046/WFN)
		Effluent discharge & treatment data	

WATER FOOTPRINT CALCULATION & ANALYSIS

Assumptions for Natural Background & Maximum Permissible Limits (As per CPCB/WHO)		
Parameter	**Cmax (mg/L) (CPCB Norms)**	**Cnat (mg/L) (Assumed Natural Level)**
BOD	30 mg/L	3 mg/L
COD	250 mg/L	30 mg/L
TSS	100 mg/L	20 mg/L

KEY FOCUS AREAS

Water Efficiency	Assessing **blue, green, and grey water consumption** to identify areas for reduction and efficiency improvement.
Wastewater Treatment & Reuse	Enhancing **Effluent Treatment Plant (ETP) performance** and optimizing **Reverse Osmosis (RO) wastewater reuse.**
Innovation & Technology	Investing in **water-efficient technologies** and process improvements to reduce wastage.
Data-Driven Decision Making	Utilizing **water balance assessments** and real-time monitoring to make informed decisions.

This Water Footprint Report serves as a guiding document to help **Richa Fashion Pvt. Ltd.** achieve its **sustainability goals**, minimize its environmental impact, and ensure long-term water security for future generations.

WATER FOOTPRINT ASSESSMENT - 2025

		Jan (Kl)	Feb (Kl)	Mar (Kl)	Apr (Kl)	May (Kl)	Jun (Kl)	Jul (Kl)	Aug (Kl)	Sep (Kl)	Oct (Kl)	Nov (Kl)	Dec (Kl)	Total (Kl)
Water Intake	Ground Water	241	230	239	235	231	233	234	233	234	233	230	235	**2808**
	Total Water Intake	**241**	**230**	**239**	**235**	**231**	**233**	**234**	**233**	**234**	**233**	**230**	**235**	**2808**
RO Water	**RO Intake**	**78**	**75**	**77**	**76**	**75**	**75**	**76**	**75**	**76**	**75**	**75**	**76**	**910**
Domestic Use	RO Filtered water - Drinking	13	12	13	13	12	12	13	12	13	12	12	13	**150**
	RO Filtered water - Cooler, Handwash, Air Washer, Utensil Wash,	10.72	10.28	10.63	10.45	10.31	10.37	10.43	10.37	10.43	10.38	10.28	10.45	**125**
	ETP RO Treated water - Factory cleaning & Gardening	2.57	2.47	2.55	2.51	2.47	2.49	2.50	2.49	2.50	2.49	2.47	2.51	**30**
	RO Waste Water - Domestic Toilet/ Flush	35	34	35	34	34	34	34	34	34	34	34	34	**409**
	Total Domestic Use	**61**	**59**	**61**	**60**	**59**	**59**	**60**	**59**	**60**	**59**	**59**	**60**	**715**
Industrial Use	Washing & Laundry	163	156	161	159	156	157	158	157	158	157	156	159	**1898**
	ETP RO Treated water - Washing & Laundry	10	10	10	10	10	10	10	10	10	10	10	10	**118**
	RO Filtered water - Boiler (Steam)	19	18	19	19	19	19	19	19	19	19	18	19	**225**
	Total Industrial Use	**192**	**184**	**190**	**187**	**185**	**186**	**187**	**186**	**187**	**186**	**184**	**187**	**2241**
Fire Tank	**Fire Tank**	**120**	**120**	**120**	**120**	**120**	**120**	**120**	**120**	**120**	**120**	**120**	**120**	**120**
ETP	From Washing & Laundry	167.64	160.62	166.15	163.33	161.14	162.16	163.05	162.16	163.09	162.20	160.63	163.39	**1955.57**
	From Boiler Blow Down	1.91	1.83	1.89	1.86	1.84	1.85	1.86	1.85	1.86	1.85	1.83	1.86	**22.29**
	Total ETP Inlet	170	162	168	165	163	164	165	164	165	164	162	165	**1977.86**
	ETP Outlet	167	160	166	163	161	162	163	162	163	162	160	163	**1948.98**
	ETP Treated Water Discharge to Municipal Authority Sewage (Without RO Treatement)	117	112	116	114	112	113	114	113	114	113	112	114	**1364.29**
ETP RO	ETP RO Inlet	50.12	48.02	49.68	48.83	48.18	48.49	48.75	48.49	48.76	48.50	48.03	48.85	**584.69**
	ETP RO Treated water - Washing & Laundry	10.14	9.71	10.05	9.88	9.75	9.81	9.86	9.81	9.86	9.81	9.72	9.88	**118.28**
	ETP RO Treated water - Factory cleaning & Gardening	3	2	3	3	2	2	3	2	3	2	2	3	**30.02**
	ETP RO Waste water	37	36	37	36	36	36	36	36	36	36	36	36	**436.39**
Discharge to Municipal Sewer	ETP Discharge (RO Waste water + (Treated waste water)	154	148	153	150	148	149	150	149	150	149	148	150	**1801**
	75% Drinking water	10	9	10	9	9	9	9	9	9	9	9	9	**113**
	Domestic Toilet	35	34	35	34	34	34	34	34	34	34	34	34	**409**
	Cooler, Handwash, Air Washer, Utensil Wash, Food Cooking	11	10	11	10	10	10	10	10	10	10	10	10	**125**
	Total Discharge in Municipal Sewer	**210**	**201**	**208**	**204**	**202**	**203**	**204**	**203**	**204**	**203**	**201**	**205**	**2448**

2025 Water Management

🚰 Total Water Withdrawal
2808 KL

💧 Ground Water
2808 KL

🥤 Domestic Usage
715 KL

🏭 Industrial Usage
2241 KL

♻️ ETP RO Water Reused
148.30 KL

♻️ RO Reject Water Reused
409 KL

🌊 Wastewater Discharge
2448 KL

ESG Highlights:

- Ground water is the primary water source.
- RO reject water is reused in domestic use.
- ETP RO filtered water is reused in industrial and domestic use.
- Wastewater is discharged to municipal sewage.

Water Footprint Type	Volume (KL/year)	Remarks
Blue Water Footprint	2808	Freshwater withdrawn from groundwater and municipal sources
Grey Water Footprint	Not Applicable	Wastewater discharged to municipal sewer for centralized treatment
Green Water Footprint	0	No rainwater-based agricultural activity

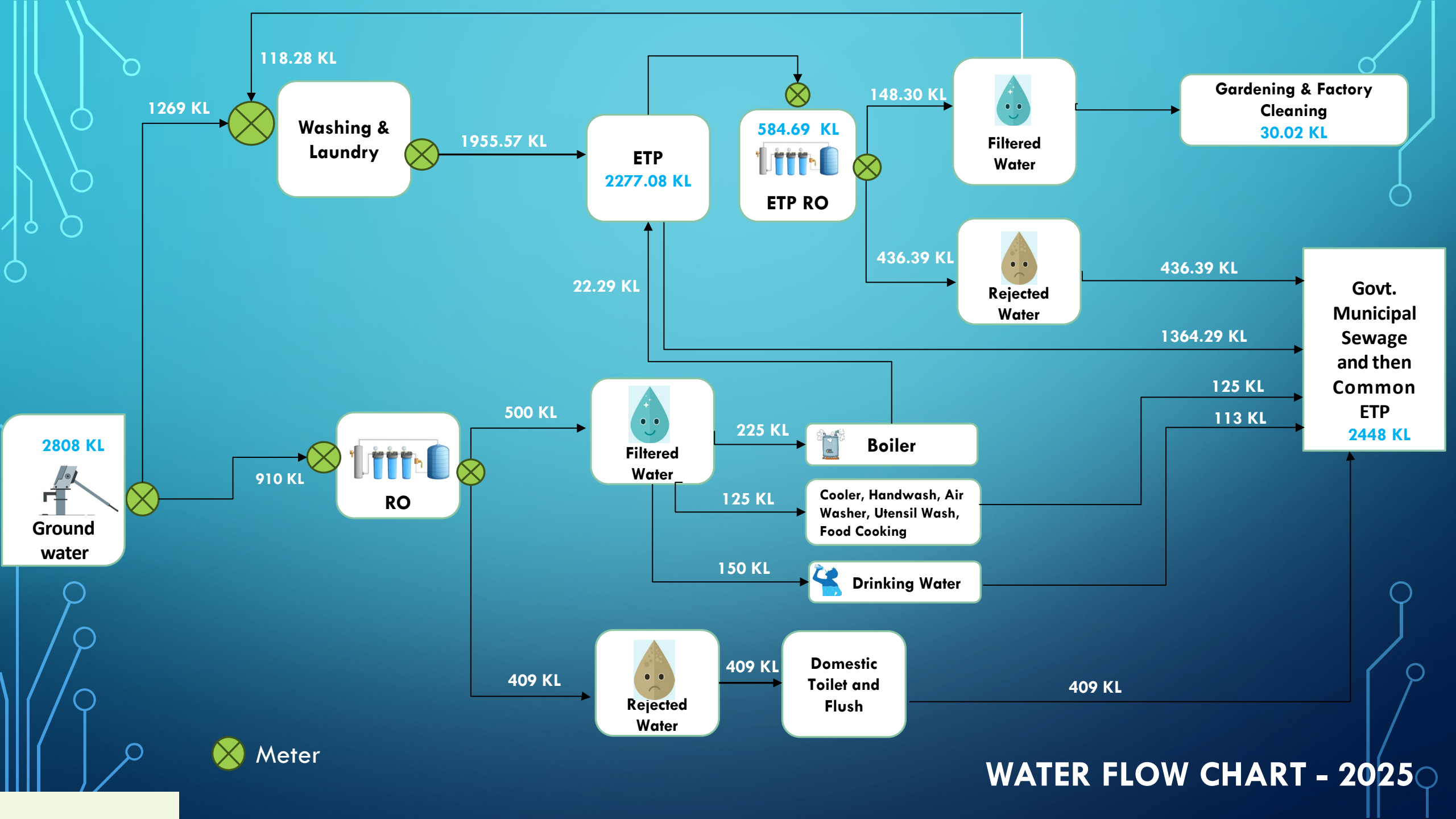
Statement:

The facility discharges wastewater into the municipal sewer system, where it undergoes centralized treatment. As there is no direct discharge of untreated wastewater into natural water bodies, the grey water footprint attributable to the facility is considered minimal and not calculated separately in this assessment.

NORMALIZED WATER DISCHARGE

DISCHARGE	Units	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Domestic (KL)	KL	55	53	55	54	53	54	54	54	54	54	53	54
No. of Working Days	Number	27	24	24	26	27	25	27	23	26	22	25	27
Discharge Per Day	KL	2	2	2	2	2	2	2	2	2	2	2	2

DISCHARGE	Units	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Industrial (KL)	KL	154	148	153	150	148.37	149.32	150.14	149.32	150.17	149.35	147.91	150.45
No. of Working Days	Number	27	24	24	26	27	25	27	23	26	22	25	27
Discharge Per Day	KL	6	6	6	6	5	6	6	6	6	7	6	6



WATER FLOW CHART - 2025

CONCLUSION

Indicator	Value
Total Water Intake	2808 KL/year
Groundwater Dependency	100%
Industrial Water Use	~75%
Domestic Water Use	~25%
Wastewater Discharge	2448 KL/year

The water footprint assessment indicates that the facility primarily relies on municipal water supply for its operational requirements. Domestic water consumption represents the largest share of total water use, while industrial water use is mainly associated with boiler and washing operations.

Wastewater generated from the facility is discharged to the municipal sewer system for centralized treatment. Continued monitoring of water consumption and implementation of efficiency measures can further enhance sustainable water management practices.

WATER RISK ASSESSMENT USING WRI AQUEDUCT

Input address	Match address	Latitude	Longitude	Major Basin	Minor Basin	Aquifer	Country	Province	Overall Water Risk
Sector 57, Noida, Uttar Pradesh, India	-	28.6051563	77.3533677	Ganges - Bramaputra	Yamuna 1	-	India	Uttar Pradesh	Extremely High (4-5)

WATER RISK ASSESSMENT USING WRI AQUEDUCT

Statement:

To assess water-related risks at the facility location, the Aqueduct Water Risk Atlas developed by the World Resources Institute (WRI) was used. The Aqueduct tool provides global datasets and maps that evaluate water stress, drought risk, flood risk, and seasonal variability.

Interpretation:

The Aqueduct assessment indicates that the facility is in an Extremely High-Water Stress region, meaning that more than 80% of available water resources are withdrawn annually. This signifies intense competition for water among industrial, agricultural, and domestic users.

Operating in such a region highlights the importance of efficient water management, conservation measures, and responsible water stewardship to minimize pressure on local water resources. In response to the identified water risk, the facility has implemented the following measures:

- Continuous monitoring of water consumption
- Installation of water-efficient fixtures and equipment
- Identification of opportunities for water reuse and recycling
- Awareness programs to promote responsible water use among employees

RECOMMENDATIONS FOR WATER MANAGEMENT

Implement low-flow fixtures / aerators, sensor-based taps & fix leakages to reduce domestic water consumption.

Rainwater Harvesting – Implement systems to **reduce borewell dependency.**

Evaluate and modify **RO reject water management strategies** to minimize waste.

Implement real-time **water monitoring systems** to track efficiency and identify further optimization opportunities.

Water Treatment Efficiency – Improve closed-loop recycling systems to reduce ETP load.

END OF REPORT