



Water resources

In many parts of the world, millions face water scarcity or poor water quality. Lack of access to clean water and sanitation has significant impacts on human health and the environment. At RB we are committed to addressing these global challenges, playing our part so that together we can make a real difference.

Making progress

Aim	Status in 2018	Aim	Status in 2018
1/3 reduction in water impact per dose by 2020	4% increase per dose vs 2012	35% reduction in water use in manufacturing by 2020	38% reduction per unit of production vs 2012

1. Water use in manufacturing

We recognise water is a precious resource. As a global leader, our role is to continually innovate and challenge our processes to reduce the impact of our water use in our operations.

2. Water use across our value chain

We take a comprehensive approach to understanding the water use associated with our products right across our value chain, through our product footprinting and sustainable product innovation programme.

3. Water scarcity

Access to water is critical for healthier lives and happier homes. Innovations in our products and operations enable us to concentrate our efforts in water-scarce areas where we can have the greatest impact.

4. Wastewater discharge

As responsible users of water we are committed to water stewardship across our operations, to protect the environment and local water sources.

5. Pollution prevention

As a global manufacturer, we take the operations of our factories and our commitment to preventing pollution seriously, maintaining high environmental standards in production processes.

1. Water use in manufacturing

We continually seek ways to reduce the water used across our operations, driving efficiencies in both process and equipment innovation.

We've invested in better metering systems that allow us to more accurately monitor our water usage and enhance our global water monitoring, tracking and reporting capabilities. Linking all our sites and management teams to one connected system is providing greater visibility of performance and opportunities across our network, enabling us to better identify further efficiencies and process improvements to reduce and recycle water, while also facilitating increased best practices sharing across our sites.

In 2013 we amended our 2020 target to a 35% decrease in water use per unit of production due to strong performance in this area. In 2018, we used 0.5981m³ of water for every 1,000 CUs of production, a 2.3% reduction versus 2017 and 38% less than in 2012, resulting in us over-achieving our stretched 2020 target ahead of schedule.

The decrease in our water consumption per unit of production is due to a variety of process improvements. For example:

- Advanced water treatment and the use of reverse osmosis, resulting in increased in-process water reuse and recycling at several of our sites, including Shashi, China; Bangpakong, Thailand; and Hosur, India.
- Water recycling on dipping lines in our plants in Shangma Qingdao, China and Bangpakong, Thailand.
- Process backwash optimisation at our sites in Nowy Dwor, Poland and Hosur, India.

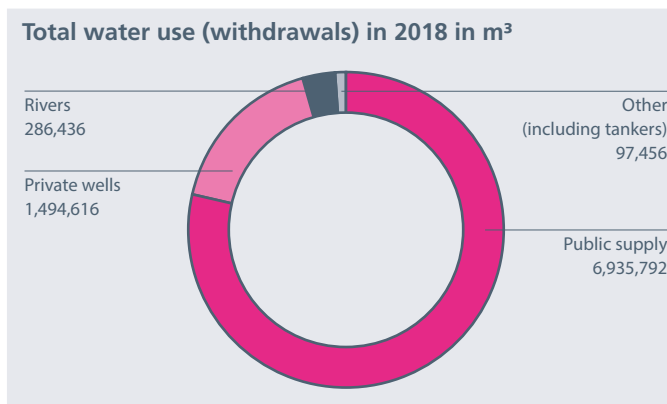
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- ‘Clean in Process’ optimisation at our site in Baddi, India.
- Pre-heating purified water used for ‘Clean in Process’, and flash steam used for water boiler feed preheating at our site in Chartres, France.
- Process re-engineering to eliminate hot water sanitisation needs at our site in Tuzla, Turkey.

All our factories are required to meet our Global Water Management Standards, which set out our approach to sustainable water best practices. All our plants have also undertaken an assessment of water use at their facilities to help identify future reduction opportunities. In addition, through our advancements in on-site water reuse and recycling, several sites, including Hosur and Mysore in India and Bangplee, Thailand, have achieved zero liquid discharges – purifying, recycling or putting back into production all the water used on site.

Following RB’s acquisition of Mead Johnson Nutrition (MJN) and the subsequent establishment of our IFCN (Infant Formula and Child Nutrition) business, we extended our water programme to these new sites and are defining a new commitment to further reduce water use. We integrated our IFCN sites into our company-wide water monitoring and reporting systems, enabling us to track and report water use and discharge volumes for 2018 and going forward. Data for 2012 that would allow us to build a baseline is not available, so we are not able to include IFCN historic performance within our RB legacy 2020 target performance data.

Across our operations we use water from a number of different sources depending on the local area. In 2018, our total water use (withdrawals) (including IFCN sites) was 8,814,300m³, of which we reused/recycled 216,207m³ of water and drew water from the following sources:



[Click here to view our water use data in Appendix 1.](#)



CASE STUDY Reuse of treated water in processes

RB’s plant in Hosur, India set itself the goal of becoming a zero discharge plant. Doing so increases the site’s water efficiency, increases recycling and decreases the overall water withdrawals, while also decreasing the levels of wastewater.

Following engineering and infrastructure modifications, treated wastewater is now recycled and mixed with incoming water in the manufacturing process. This has led to water savings averaging over 600,000 litres each month.

2. Water use across our value chain

One-third less water impact per dose by 2020

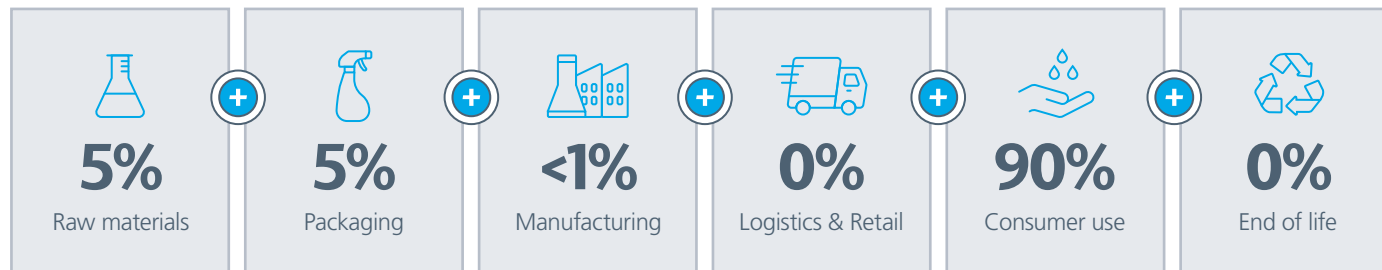
RB recognises the importance of access to safe water. We aim to reduce our water impact and, at the same time, help people lead happier lives in healthier homes through our products. We are committed to reducing the water impact per dose by a third by 2020. All our products require water at some point in their life cycle, with around 90% of our water impact coming from consumer use, 10% associated with our raw materials and packaging and less than 1% from our manufacturing sites. Understanding our total water use and total water impact enables us to prioritise activities that will deliver the biggest reductions. Underpinning this is the robust calculation of water use and impact across our full value chain. Water is a local issue and quantifying water impact allows us to consider water scarcity at the location where it is used. Tracking water use additionally gives us a clearer view on reductions.

We measure our total water use in litres and total water impact in litre equivalents (e-litres) per dose of product against a 2012 baseline. The breakdown of our total water impact is shown in the picture below. In 2018, our total water use per dose decreased slightly to 5.1 litres per dose, a 2% decrease compared to 2017; however, there has been a 4% increase in water impact to 9.2 e-litres per dose compared to 2012.

Given that such a large share of total water use and impact arises when people use our products, we continue to develop new products that need less water. We are focusing attention on developing water-efficient hygiene solutions like Dettol Squeezy liquid soap and Dettol Touch of Foam soap which require significantly less water to use than conventional bar soap. However, we are not yet seeing significant reductions in the largest part of our footprint at the point of consumer use.

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Our water impact



[Click here to read more about our sustainable innovation programme.](#)

[Click here to view our product water use data in Appendix 2.](#)

2018 performance

We reported an increased impact for 2018. This was driven by significantly increased sales of bar soap in our Middle Eastern markets. As our impact methodology includes water impact at consumer use and is also weighted for use in water-scarce geographies, this rise in consumer use in the Middle East accounts in the main for the 4% increase versus our baseline.

We will continue efforts to reduce our water impact, through a combination of reducing water use in production, building awareness of the issue among people who use our products and also developing lower water-impact products.



CASE STUDY

Dettol Squeezy liquid hand wash

Dettol Squeezy liquid hand wash, launched in India, provides the protection of a liquid hand soap at the price of a bar soap. As a liquid, it requires 40% less water to use than bar soap. Its innovative packaging eliminates the need for a pump to dispense the liquid, resulting in less component material and easier recyclability than conventional liquid hand wash. Because it dispenses just the right amount of soap, there are more doses per pack, resulting in carbon and water impact savings of over 60% per dose and a pack saving of over 50% per dose.

3. Water scarcity

We recognise the importance of local water scarcity and the difference we can make to local communities, eco-systems and businesses. Through our product portfolio footprinting and water risk analysis we have identified areas where we can have greatest impact and where we can help our consumers and the communities where we work to manage this scarce resource.

With our R&D teams and Powerbrands driving innovations such as our Dettol Squeezy liquid hand wash and the support of our Sustainable Innovation App, we are already seeing positive change and are looking forward to sharing more such innovations during 2019.

We have assessed water scarcity across our operations in line with the WRI Aqueduct and WFN methodology. As part of our water efficiency programme we have increased our efforts to use water in the most efficient way possible, particularly at sites located in water-scarce areas. A key element is our focus on developing new ways to recycle and reuse water, with several sites such as those in Hosur and Mysore, India and Bangpalee, Thailand, now achieving zero liquid discharge. This means all wastewater is purified and recycled or put back into the production process. To help tackle water scarcity, we work with local communities with projects that improve access to and replenishment of water sources. In India we are using geological analysis together with installing rainwater harvesting and direct feeds into the water table to recharge local groundwater.

CASE STUDY CDP



More details of our approach can be found in our CDP water disclosure, for which in 2018 we received an above-sector average score of B. In 2019 we are aiming to improve our score even further (see www.cdp.net for more information).

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4. Wastewater discharge

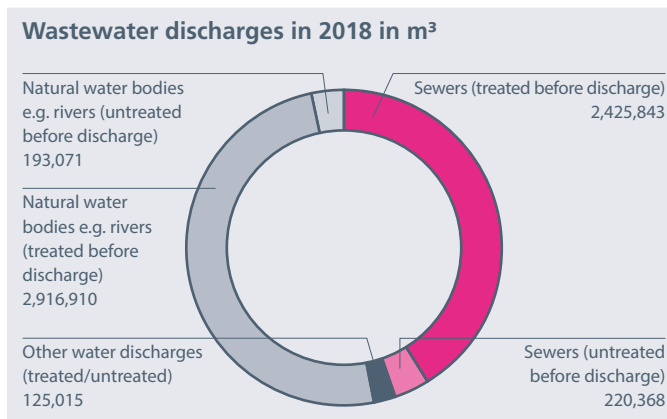
We are committed to discharging wastewater in a responsible way that ensures water is treated in the most efficient way possible and the environment is not degraded. All production sites must implement our wastewater standard and ensure compliance with applicable local regulatory requirements. Our on-site wastewater treatment plants undergo thorough and regular maintenance and are regularly modernised to improve their effectiveness.

This year, our focus on water led to upgraded wastewater discharge facilities at several of our sites in India, China and Thailand. This investment complements modifications and improvements made at other sites, for example our facilities in Indonesia, South Africa, Colombia and Bahrain.

In 2018, we discharged 0.246m³ of water per 1,000 CUs of production. This represents a slight increase of 3.7% versus 2017 due to changes in product mix, however an overall reduction of 50.3% since 2012. For our IFCN sites, data for 2012 that would allow us to build a baseline is not available, so is not included in these trend performance figures.

We have integrated wastewater discharge monitoring for our IFCN operations into our company-wide data systems, enabling us to report for 2018 and going forward. Of the water we used in 2018, 66% was discharged into water systems. The remaining 34% went into our products, was in liquid and solid wastes sent off site, or evaporated from cooling and process systems.

In absolute terms, we discharged 5,881,207m³ in total in 2018 (including IFCN sites) via the routes shown in the following chart:



[Click here to view our water use data in Appendix 1.](#)



CASE STUDY Cali factory

We are committed to discharge wastewater in a responsible way and continue with our regular wastewater technology investment and maintenance programme. For example, our Cali factory in Colombia installed a new wastewater treatment plant to ensure proactive compliance with future legislative changes. The system is also connected to the grid through attached solar panels, with excess energy being consumed by the rest of the factory.

5. Pollution prevention

As a responsible global manufacturer, we take our commitment to preventing pollution seriously. For RB, doing what the law expects us to do is merely our minimum standard. Continuous improvements are achieved through our Global Environmental Standards which are assessed by our corporate Environmental team, who also provide training to drive improvements, share best practices and audit environmental standards across our operations. All sites must meet our standards, with a programme of self-assessments and monthly corrective action follow-ups, in addition to our corporate compliance audits.

In 2012, we set a target for all manufacturing sites to implement functioning EHS management systems externally certified to ISO 14001 by 2020. In 2018, we reached and surpassed this target ahead of schedule by achieving a 'one system' integrated ISO 14001 certification across both our corporate and global operations.

During 2018, no fines or prosecutions pertaining to environmental breaches or pollution were registered. During 2018, RB sites including our newly acquired IFCN facilities had no spills.



[Click here to read RB's Environment policy.](#)



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Appendix 1

These tables show the water use and discharge from our own operations, benchmarked against previous years.

Water use – operations

	Units	2012	2013	2014	2015	2016	2017	2018	% Change vs. 2017	% Change vs. 2012
Water use per unit of production*	m ³ per 1,000 CU	0.964	0.788	0.718	0.675	0.657	0.612	0.598	-2.3%	-37.9%
Water discharge per unit of production*	m ³ per 1,000 CU	0.496	0.344	0.289	0.281	0.289	0.238	0.246	+3.7%	-50.3%

* Pre-acquisition data for our IFCN business is not available. To ensure comparison with our 2012 target baseline, 2018 data shown excludes IFCN. Including IFCN, 2018 manufacturing and warehouse water use was 1.1056 m³ per 1,000 CUs and water discharges m³ 0.738 per 1,000 CUs.

Water discharges – quality

	Units	2016	2017	2018
Direct Chemical Oxygen Demand**	metric tonnes	1,048,493	1,020,921	637,264

**Wastewater quality (COD) data shown above is calculated based on a 65% coverage of sites, including IFCN. Data is not currently captured centrally for the remaining sites, however we are actively working to align our wastewater quality data reporting process to improve this percentage going forward.

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Appendix 2

Water use – product*

Total water use 2018 (RB excl IFCN)	Units	Raw material	Packaging	Manufacturing	Logistics & Retail	Consumer use	End of life	Total/ average
Water use 2018	total (million litres)	605,800	381,800	5,300	0	1,774,900	0	2,767,900
	litres/dose	1.12	0.71	0.01	0	3.29	0	5.13
	% split	22	14	0	0	64	0	100

Total water use reductions (RB excl IFCN)		2012 (baseline)	2017	2018	% Change on 2012	% Change on 2017
Water use (litre/dose)		4.9	5.2	5.1	-4%	-2%

Total water use for IFCN 2018	Units	Raw material	Packaging	Manufacturing	Logistics & Retail	Consumer use	End of life	Total/ average
Water use 2018	total (million litres)	618,500	72,000	4,900	0	318,600	0	1,014,000
	% split	61	7	0	0	31	0	100

Water impact – product*

Total water impact 2018 (RB excl IFCN)	Units	Raw material	Packaging	Manufacturing	Logistics & Retail	Consumer use	End of life	Total/ average
Water impact 2018	total (million e-litres)	266,900	247,000	4,800	0	4,465,200	0	4,983,800
	e-litres/dose	0.50	0.46	0.01	0	8.28	0	9.25
	% split	5	5	0	0	90	0	100

Total water impact reductions (RB excl IFCN)		2012 (baseline)	2017	2018	% Change on 2012	% Change on 2017
Water impact (e-litre/dose)		8.91	8.22	9.25	+4%	+12%

Total water impact for IFCN 2018	Units	Raw material	Packaging	Manufacturing	Logistics & Retail	Consumer use	End of life	Total/ average
Water impact in 2018	total (million e-litres)	288,800	45,700	1,000	0	122,100	0	457,600
	% split	63	10	0	0	27	0	100

* Pre-acquisition data for our IFCN business is not available. To ensure like-for-like comparisons, target performance trends vs 2012 exclude IFCN. IFCN results are shown as a separate entry.