

Checklist: Simple Ways to Reduce Water Usage in Non-Domestic Premises

Do you want to know how water-efficient your premises is? Go through the checklist to find out.

Cooling Towers

S/N	Measure to reduce water usage	Y/N
1	Check cooling towers regularly to prevent overflow and splashing	
2	Avoid operating water cooled air-conditioning systems at temperatures below 24 °C.	
3	Use cooling tower water treatment systems that can achieve seven or better cycles of concentration at acceptable water quality.	
4	Use NEWater or on-site recycled water from approved sources.	
5	Use variable speed drive circulation pumps.	
6	Reduce the operating hours for water cooled air-conditioning systems (e.g. start up the air conditioning system 30min later and shut down the air conditioning system 30min earlier compared to usual practices). *	

Swimming Pools

S/N	Measure to reduce water usage	Y/N
1	Inspect water storage tanks especially the swimming pool's Balancing Tank regularly to ensure that the float switch mechanisms function properly to prevent overflow.	
2	Ensure that the water tank drain-out valves are shut tightly after the washing of tanks.	

Washing Activities (e.g. Vehicle Washing, Façade cleaning, Floor washing)

S/N	Measure to reduce water usage	Y/N
1	Carry out washing activities only when necessary. Supervise washing activities closely to ensure that there is no water wastage.	
2	Stop the use of high pressure jets and hoses for washing activities. Use a mop instead.*	
3	Reduce the frequency of façade cleaning and floor washing.*	
4	Stop vehicle washing (e.g. service van, Board vehicles etc.).*	

Toilets/ Pantries

S/N	Measure to reduce water usage	Y/N
1	<p>Ensure that the flow rates of all water fittings meet the water efficient flowrate and flush volume requirements.</p> <p><i>To check flowrates, you will need a measuring cylinder and stopwatch/ watch:</i></p> <p><i>a. Measure the flow rate for 6 seconds.</i></p> <p><i>b. Multiply the volume of water by 10. (The flow rate will be in litres per minute)</i></p>	
2	Provide hand sanitizers to minimise the need to wash hands.*	
3	Convert urinals to waterless type by shutting water supply to urinals and use waterless products such as microbes.*	

Irrigation

S/N	Measure to reduce water usage	Y/N
1	Water plants only when necessary and do so in the early morning or late evening (between 4 – 7 am or 6 – 9 pm) to minimise evaporation losses.	
2	Use non-potable water for irrigation.	
3	Use water efficient irrigation systems (e.g. drip irrigation system) with rain sensor/ soil moisture sensor.	
4	Use drought tolerant plants that require minimal irrigation.	
5	Sprinklers shall not be used for watering any garden, lawn or land including sports grounds.	
6	All hoses must be fitted with spring loaded nozzles. The use of an open hose for watering of plants and washing activities is not allowed.	
7	Reduce the frequency of irrigation to every 3 rd day and not more than 15min.*	
8	Avoid planting new plants.*	
9	Reschedule turfing and landscaping works.*	

Monitoring of water usage

S/N	Measure to reduce water usage	Y/N
1	Install private water meters at key water usage areas and monitor water consumption closely by taking water meter readings daily. This will help you to understand water usage within your premises and identify leak areas quickly.	
2	<p>Check for leaks by following the steps below:</p> <ul style="list-style-type: none"> a. During off peak periods when there is no or negligible water use (eg. 2 – 5 am) b. Ensure that all the tanks are isolated/fully filled c. Watch the water meter to see if the counter moves (a movement on the counter means there is a leak somewhere) <p>There could be a leak if the following occurs:</p> <ul style="list-style-type: none"> a. Sudden high consumption b. Clean water flows into the manholes, gully traps, floor traps and drains c. Clean water flows into flushing cistern continuously d. The ground over buried pipes is damp or wet for many days e. There is damp wall or white wash/paint peeling f. There is an unexplained drop in water pressure. <p>If there is a leak, engage a PUB Licensed plumber to repair the leaks promptly.</p>	

Senior Management and Staff Participation

S/N	Measure to reduce water usage	Y/N
1	<p>Senior Management can encourage water efficient practices during weekly meetings.</p> <ul style="list-style-type: none"> a. Review water consumption data. b. Discuss water efficiency measures to reduce water consumption. c. Discuss and review work processes to reduce water consumption 	
2	Monitor the work of Managing Agents, contractors and cleaners to reduce water usage and prevent water wastage.	
3	Display water conservation messages around the premises and regularly educate/remind employees to practise water conservation to help save water.	
4	Encourage staff suggestions on water saving measures. (e.g. provide incentives for staff suggestions).	
5	Display posters to remind staff about water conservation.	

Others

S/N	Measure to reduce water usage	Y/N
1	Washing of Water Tanks - The water level in the tank must be used to around 150 to 200mm above the bottom of the tank before the tank is isolated and the outlet pipes shut off for washing.	
2	Reuse for Non-Potable Use - Reuse AHU condensate for non-potable use such as cooling towers make-up.	
3	Water Efficiency Management Plan - Develop a comprehensive Water Efficiency Management Plan to cut down on water consumption.	

** Further measures to reduce water consumption during dry spell.*