INTERNET ARTICLE

DWS and Sasol partner to reduce water losses

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While South Africa’s non-revenue water levels compare well internationally as a water scarce country, we need to do all we could to prevent the unnecessary loss of this resource.

The Draft Second National Water Resources Strategy (NWRS2) implemented by government through the Department of Water and Sanitation (DWS) has identified the implementation of water use efficiency, conservation and water demand management as a core strategy to ensure sufficient water to meet South Africa’s needs going into the future.

According to the Water Research Commission (WRC), this ‘non-negotiable performance area’ must be implemented immediately in all water use sectors, specifically municipalities. “In view of water scarcity, it is essential that such water losses must be curtailed, especially in terms of the need to provide for the growing water demands of new socio-economic development,” the strategy points out.

In order to improve the current situation, the water sector must have a clear indication of the current status of non-revenue water in South African municipalities, more specifically what the actual water losses are and how they are split between physical leakage (real losses) and commercial losses (apparent losses).

According to Mr Rivash Panday, Senior Specialist Sustainable Water at Sasol Group Risk and SHE, scarcity of water has been ranked by the World Economic Forum’s Global Risk Report as one of the biggest threats facing the planet over the next decade.

Panday noted that this threat is amplified in water scarce regions like South Africa including companies with large and complex footprints like Sasol (compared to our peers we have an unusually large water demand from water scarce regions).

He added: “Water has strategic importance for Sasol due to our upstream manufacturing activities. Companies that identify the lack of water as a significant risk to their business are taking action via improved water management practices referred to as corporate water stewardship."

Panday explained that water stewardship is a stakeholder-inclusive process that involves site-and-catchment based actions to decrease water risk exposure.

“It should be remembered that Sasol has been a signatory to the United Nations (UN) Global Compact CEO Water Mandate since 2007 and has adopted the mandate’s water stewardship framework in responding to water risks,” he said.

It is in this regard that Sasol, one of the biggest users of water in South Africa for business-related activities, decided to partner with the Department to collaborate what is called the DWS-SASOL collaboration - Zamdela Water Loss Reduction Project. This project was encouraged by similar operations in water partnership under the umbrella of the United Nations (UN).
Driving water partnerships is advocated by the UN Global Compact (UNGC) Chief Executive Officer (CEO) Water Mandate regarding collective action and community engagement.

Firstly, research has revealed that non-revenue water is close to 37%; that 45% of municipalities have poor/no water loss information and plans and that an average water consumption in SA is 238 L/capita/day as opposed to international which is 178 L/c/d.

In partnering with Sasol to achieve this objective, DWS committed to affect the following measures:

- Reconciliation Strategy identified meeting 15% savings target in reducing urban water losses by Municipalities as a significant opportunity in bringing the IVRS into balance.
- Appeal to the private sector to support Government initiatives in water conservation/water demand management (WC/WDM).
- Included the development of a Water Offsetting Policy (being revised to Water Stewardship framework policy) in the National Water Resource Strategy 2 (NWRS2) as an incentive for Business to participate.
- Consider merging the 2 policies to be called Incentive Based Partnership Policy Framework.
- A company may offset for good corporate stewardship, or may seek a regulatory benefit such as higher-priority access to water in times of drought.

Panday explained that Sasol has concluded that water security for our operations can be improved in a more meaningful way by saving water beyond its factory fence line.

Again, a War on Leaks Project (WoL) in Metsimaholo Local Municipality (MLM) partnering Sasol involved a water conservation/water demand management project for MLM in Sasolburg, in collaboration with Rand Water, GiZ and the DWS.

Observations revealed that a feasibility study completed in 2012 concluded that the focus of the MLM War on leaks project should be in the Greater Zamdela area.

DWS contributed R4 million (baseline establishment), Sasol R2.9 million (advanced pressure management) and GiZ 60,000 Euros (education and awareness raising).

The partnership support contributed to MLM achieving a reduction in potable water demand in the greater Zamdela area by 23% (3.1 ML/day) due to pressure reduction (equates to savings of approx. R9 million/annum).

Saving equates to offsetting 5% of Sasolburg Operation’s (SO’s) raw water demand (60 ML/day) and 72% of SO’s potable water demand (4.3 ML/day).

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