

Abstract Title	Sustianable process water system
Topic	<p><input type="radio"/> Improving water quality</p> <p><input type="radio"/> Resilient water systems</p> <p><input type="radio"/> Circular solutions: Reuse, Recover and Recycle</p> <p><input checked="" type="radio"/> Transitions in water, agro/food and energy</p>
Challenges and Solutions	<p>In the Provence of North Holland in the Netherlands a business area of Greenhouses and Datacenters is established and continuously growing. Local infrastructure on energy and water is already under a lot of pressure. There is a need for (sustainable) alternatives. Specifically fresh water is scarce. Currently the datacenters have potable water as their main water source. This is no longer socially acceptable. The greenhouses depend strongly on groundwater that is threatened by saline intrusion and more strict environmental legislation on abstraction and infiltration. Solution: Create a large freshwater storage underground based on rainwater capture during the wet season and apply during the dry season.</p>
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Abstract	<p>At the business park AgriPort, horticultural and data center activities are combined. ECW Warmte BV provides all utilities for these activities.</p> <p>Sustainable water management is on top of mind of all companies on the business park. To support this the use of drinking water needs to be reduced to a minimum. ECW, Arcadis and KWR Water have developed a sustainable process water system to support this ambition. This future water system will supply the cooling units of the data centers with the right quantity and quality at the requested time. It ensures</p>

a potable water free operation of the datacenters.

It also supports the AgriPort greenhouses in their water demand when existing storage volumes fall short.

The developed system is a rainwater-based system. All rainwater from clean surfaces is captured, treated and stored in a subsurface aquafer. This stored rainwater is extracted when needed, treated to the required quality and distributed to the clients depending on their needs. Starting with a large data campus and two horticulture business, the water treatment facility, supportive transporting and distribution system the first building blocks to a Agriport wide Water bank are set.

Figures/diagrams
/illustrations

Up to 2 (in abstract)



