

# THE ROAD FROM WATER SHORTAGE TO SUCCESS

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## **Abstract**

During the years 2014-2016 the region and Öland suffered record-breaking low groundwater levels, Borgholm Energi AB had some very important and hard decisions to make in order for us to be able to produce and deliver enough drinking water to our customers. The situation was very critical in all of our groundwater reservoirs, and the forecast for the region was that the warm weather and lack of sufficient rain at the right time for our groundwater was to continue. Initially we focused our work based on Borgholm Energi AB “Strategy and main targets”, from that we put together a list of short and long term actions we needed to act on. The list included a variety of relatively easy actions to more complex solution.

One of the solutions was to build the new desalination plant in Sandvik. This decision was made after careful consideration of all aspects at the time, the severity of the situation, the time factor, the forecast, availability of other water/solutions, where water was most needed, added future advantage etc. The Sandvik desalination plant decision was taken in May and June 2016, and it stood ready to produce drinking water in May 2017.

Now in 2019, what have we learned from this journey?

It’s now clear that it was important that we made this decision at the time. We got the volume of drinking water we needed at the right time to be able to not only deliver the sufficient amount of water but also continue with our municipality’s expansion. But an even more important lesson we have learned is the added positive side effects that we have and are seeing. Most were expected but not to the extent that we now are seeing. The drinking water from the Sandvik desalination plant is delivered to the intended area, the amount of water we deliver into the other plants areas allowed us in a very effective way to run these groundwater plants in a more efficient way. We can monitor and keep the infiltration and groundwater outtake at a more natural way. This will benefit the surrounding areas and improve quality, both of the water produced and of the groundwater. It has extended our predicted production resources in case of a similar situation to 8-9 years.

**Keywords:** Action plan, Desalination plant, Drought, Water shortage