### **Environmental data**

# 7.3 Water

Enzyme manufacturing is a water-intensive process that also generates significant amounts of wastewater. Novozymes strives to use water efficiently and comply with wastewater discharge regulations in all regions of operation.

Many of the raw materials required in enzyme manufacturing are agriculture based and water intensive to produce. Downstream, some of Novozymes' biological solutions can help customers and consumers save water during application compared with conventional methods, and wastewater treatment solutions help to improve the quality of treated water generated in some cases, while improving treatment processes in others. Novozymes focuses on managing water within its operations to mitigate the risks associated with water usage and wastewater disposal.

Novozymes' sustainability policy and its longterm target to improve water efficiency in its own operations drive water management within operations. For more information on water targets, please refer to the Targets section.

### $(\S)$ ACCOUNTING POLICIES

Water includes drinking water, industrial water and externally supplied steam. Drinking water is water of drinking water quality. Industrial water is water that is not of drinking water quality, but is suitable for certain industrial processes, for example for use in cooling towers. Industrial water can come from lakes or wells.

The reported quantities are stated based on the metered intake of water to Novozymes and include quantities consumed both in the production process and in other areas. The reported quantities of steam are converted to volume of running water and are therefore subject to calculation. Water efficiency is measured by dividing water consumption by gross profit. The efficiency improvement is calculated as the relative improvement in efficiency compared with the base year (2014). The quantities used in the calculation correspond to those reported as water consumption.

For sites acquired in 2015 or later, the baseline index is calculated based on the data reported in the first full year of operating as a Novozymes site. Divested sites are removed from the index for the full period. Newly constructed sites are included from the first quarter after qualification.

Wastewater is measured as the volume discharged by Novozymes or calculated based on water consumption.

### Water by primary source

1000 m <sup>3</sup>	2016	2015
Drinking water	4,984	4,733
Industrial water	1,931	1,943
Steam	310	289
Water, total ESG	7,225	6,965

# 7.3 Water (continued)

Two departments are responsible for water management: Supply Operations and Quality, Environment & Safety. Together, they implement projects that improve water efficiency and reduce wastewater in Novozymes' production. The wastewater is treated internally or externally in biological wastewater treatment systems before being discharged to the recipient or used in agriculture for irrigation.

In 2016, Novozymes' water efficiency improvement was 6%. This was lower than expected because of slower-than-expected gross profit development and ongoing challenges in the reverse osmosis system for water reuse at the Kalundborg site in Denmark. Going forward, the focus will be on replicating successful projects for wastewater capture and reuse across sites.

### Wastewater treatment

<b>1,000</b> m <sup>3</sup>		2016	2015
Wastewater used for irrigation		596	358
Wastewater discharged		4,796	4,559
Wastewater volume, total	ESG	5,392	4,917

## Wastewater by treatment method



Novozymes-treated to irrigation

#### Gross profit vs. water consumption

