



<p><u>Project name:</u> <i>SolarBrew Göss</i></p>	<p><u>Picture:</u> </p>	<p></p>
<p><u>Country:</u> <i>Austria</i></p>	<p><u>Sector:</u> <i>Food &amp; beverage</i></p>	<p><u>Sub-sector:</u> <i>Brewery</i></p>
<p><u>Project description:</u> <i>The mashing process has been changed to a low-temperature-process by integrating additional heat exchanger plates. Hot water is now used instead of steam, which allows better renewable energy integration. A 1,375 m<sup>2</sup> (aperture) solar thermal collector field provides hot water for the mashing process.</i> <i>A vapour condenser recovers the waste steam, which occurs during the start-up of the wort boiling process. The produced hot water is also integrated into the hot water distribution network of the brewery.</i></p>		
<p><u>Process optimisation:</u> <i>Retrofit of the mash tun to increase the heat transfer area with additional heat exchanger plates (so called dimple or buco plates) to allow hot water supply instead of steam.</i></p>	<p><u>System optimisation:</u> <i>A vapour condenser will recover the waste steam, which occurs during the start-up of the wort boiling process. The produced hot water will be integrated into the hot water distribution network of the brewery.</i></p>	<p><u>Energy supply technology:</u> <i>Solar thermal energy is integrated with 1,375 m<sup>2</sup> (aperture) of special novel medium temperature collectors optimised for temperatures in the range of 80 to 100 °C.</i> <i>A storage tank of 200 m<sup>3</sup> is used.</i></p>
<p><u>Energy saved [%, MWh/a]:</u> <i>Not specified</i></p>	<p><u>Energy saved [%, MWh/a]:</u> <i>Not specified</i></p>	<p><u>Fossil energy saved [%, MWh/a]:</u> <i>400 MWh/a (solar gains based on feasibility study)</i> <u>CO2 emissions saved [%, t/a]:</u></p>

		196 t/a
<p>Link to further information:</p> <p><a href="http://www.aee-intec.at/index.php?seitenName=projekteDetail&amp;projektId=146&amp;lang=en">http://www.aee-intec.at/index.php?seitenName=projekteDetail&amp;projektId=146&amp;lang=en</a></p>	<p>Co-ordinator, realising partner:</p> <p>FP7-project</p> <ul style="list-style-type: none"> <li>- AEE INTEC (project coordinator)</li> <li>- HEINEKEN Supply Chain B.V.</li> <li>- GEA Brewery Systems GmbH</li> <li>- SUNMARK A/S</li> </ul>	