



Environment

WINNER

# By the end of 2018, the North Utilities Maintenance Shop is on track to become the first county project to meet net-zero energy status



<b>Project</b>	<b>North Utilities Net-Zero Energy Project (DNRP/Parks)</b>
<b>Rationale</b>	<ul style="list-style-type: none"> <li>• King County’s Strategic Climate Action Plan calls for at least 10 County construction or retrofit projects to achieve Net-Zero Energy or Living Building Challenge certification by 2020.</li> <li>• Net-zero energy means that a facility generates on-site as much energy as it uses each year.</li> </ul>
<b>Problem</b>	<ul style="list-style-type: none"> <li>• In the existing North Utilities Shop complex, the opportunities had to be carefully evaluated to reduce energy use enough to be offset by the solar power generated on the available roof space, cost effectively.</li> <li>• As a further challenge, the facility’s energy use recently rose 15% when the shop began to fabricate metal park bollards (posts).</li> </ul>
<b>Approach</b>	<ul style="list-style-type: none"> <li>• This project integrated cost-effective solar panels and cutting-edge energy efficient lighting and mechanical equipment.</li> <li>• The 200 installed solar panels are on track to generate over 44,600 kilowatt-hours this year.</li> <li>• The building’s lights were retrofitted to high efficiency LEDs.</li> <li>• A premium-efficiency heat pump system replaced the heaters and air conditioners in the office and shop spaces.</li> <li>• In the 12 month period from October 2017 through September 2018, the facility generated 98% of its 12 month energy use (42,030 of 42,750 kilowatt-hours).</li> </ul>



**Executive’s**  
Performance  
Excellence Award

**PROJECT TEAM:**

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