

Hi, my name is Hosanna and I'm in 9th grade at Duluth East Highschool in Duluth, MN. I'm part of a climate club combined with our local Middle School (Ordean East). We have been working on getting solar panels for quite a while and these are our conclusions: some environmental benefits of solar panels include improved air quality and offsetting carbon emissions from electricity. The electricity provider for Ordean is Minnesota Power and they use 50% renewable energy and 50% fossil fuel based energy. Switching to solar will help offset those carbon emissions. Solar also reduces the amount of toxic chemicals going into the environment and reduces waste through reducing and recycling the solar panels when they are done. All these things can contribute to making the Earth greener and educating students about different types of renewable energy. With research we've concluded that the cost of offsetting 1.2 megawatts of the school would be \$3, 698,400, the annual savings would be \$172,917, and the payback time would be 21 years or less depending on the fluctuation of electricity prices. Once the solar panels are paid off the energy from the solar panels will be of no cost to the school and the annual savings can be put towards paying off the solar panels.