

Team Control Number

**11682**

Problem Chosen

**A**

**2021**

**HiMCM/MidMCM**

**Summary Sheet**

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(Your team's summary should be included as the first page of your electronic submission.)

Type a summary of your results on this page. Do not include the name of your school, advisor, or team members on this page.

As the demand for renewable energy continues to rise, homeowners are turning towards solar-powered houses. However, many individuals have no idea how to calculate their energy needs to install a solar battery bank. This leads to either insufficient wattage output, which will then require the use of an external power grid or an excess in the amount of money spent on batteries. As such, it is crucial for people who wish to use solar panels to determine which type of battery they should use to both meet their demands and cut on expenses. Our mathematical model aims to address the following problem, determine the most cost-effective way to install and have an insight into cement batteries.

First,