

Problem

- Need

- Stakeholders: TCNJ Energy Management Team, Developers, TCNJ
- Market Need: As the effects of climate change become more apparent, it was important to create a tool that allows the TCNJ Energy Management team to reach their goal of becoming carbon neutral by 2040

- Approach

- Extract data from database using metername, start date, and end date
- Format the data for web page elements
- Create a table
- Create line charts
- Create stat cards to display averages and sums



The screenshot shows a web application interface for "CSC 315: Energy Demand Tool". At the top is the TCNJ logo, which includes a crest and the text "TCNJ THE COLLEGE OF NEW JERSEY". Below the logo, the title "CSC 315: Energy Demand Tool" is displayed. The interface contains three input fields: "Select Meter:" with a dropdown menu showing "EL1", "Enter Start Date:" with a date picker showing "01/30/2019", and "Enter End Date:" with a date picker showing "08/30/2019". At the bottom is a blue "Submit" button.

Solution

- Benefits

- Our tool uses TCNJ specific energy demand data
- Our queries use the closest start date and end date based on user input
- Our design uses bootstrap for better accessibility on mobile devices

- Cost

- The tool can be used as a standalone website
- For more exposure the tool could be
 - Embedded at <https://energy.tcnj.edu/> as a separate module
 - Or, for easier setup, the standalone website or the GitHub repository could be linked at <https://energy.tcnj.edu/>

