

Double Trouble Feature: Greatest Hits from the KYMAA!

Two teams of students from NKU participated in the Mathematical Contest in Modeling this year, and each studied the same problem concerning clean energy. Each will present their solution, just as they did at the Kentucky meeting of the Mathematical Association of America last weekend.

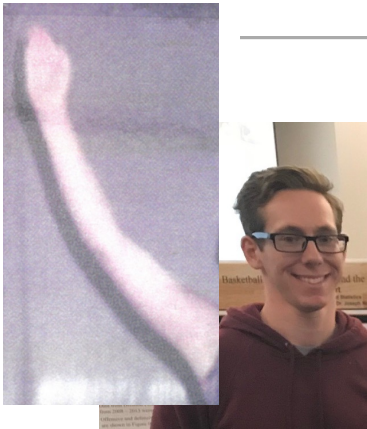
Friday, 4/13
3:05, MEP461



Fueling the Future Four States at a Time

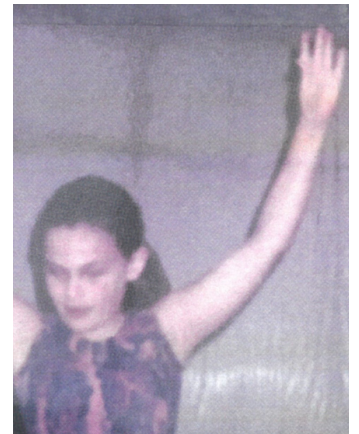
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Abstract: As part of the annual Mathematical Contest in Modeling, we created a metric called "the energy score", a measure intended to assess a state's usage of clean and renewable resources. The energy score has two components: the first rewards states for minimizing CO₂ emissions and the second rewards states for maximizing renewable energy usage. Based on the trend of a state's energy scores from 1960 to 2009, we created concise energy profiles that allowed us to rank the energy consumptions of states wishing to form energy compacts and to provide recommendations on how to improve each state's energy profile.



Examining Renewable Energy Trends for Texas, New Mexico, Arizona and California

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Abstract: As part of the annual Mathematical Contest in Modeling, we created energy profiles for four western states that are interested in forming an energy compact to guide their increased use of clean energy. Based on data covering 50 years and 605 variables, we made predictions about how much renewable energy the states will be producing in the future and developed realistic targets for increasing each state's reliance on renewable energy. Specific recommendations were also created to help states move toward their energy goals.

