

AASHE STARS Comparative Analysis of Energy Related Credits for Schools Participating in the 2015 Appalachian Energy Summit

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Abstract:

Hundreds of institutions are members of the Association for the Advancement of Sustainability in Higher Education (AASHE), and participate in AASHE's Sustainability Tracking, Assessment and Rating System (STARS). STARS provides a framework to quantify and describe sustainability actions in a wide range of categories. This framework is designed to help universities world wide collaborate about sustainability initiatives and share best practices. My research involves using this tool to its fullest intent by doing a comparative analysis of STARS credits relating to energy consumption, generation, and management. I am limiting the scope of my comparative analysis to schools attending the Appalachian Energy Summit, in hopes that conclusions drawn from this research will be highly applicable to audience members.

Methods:

The proposed analysis will be both holistic and comparative. Credit scores will be compiled between identified schools and used to calculate average scores as well as highlight schools with exceptional scores.

STARS credits to be analyzed include but are not limited to:

- Operational Characteristics
- Green House Gas Emissions
- Building Operations and Maintenance
- Building Design and Construction
- Building Energy Consumption
- Clean and Renewable Energy
- Campus Fleet
- Sustainable Transportation
- Sustainability Strategic Planning

Credit score averages from all selected schools will be used to discuss common strengths and weakness between sustainability policy and programs from participant schools. The research questions I am addressing in this holistic approach are:

1. What are the common strengths and weaknesses in selected institutions relating to energy policy and initiatives?
2. Are these common strengths reached by similar policies or a variety of solutions?

Compilation of scores will also reveal institutions that have unusually high scores in these credits. The outliers identified will undergo a thorough investigation of supporting literature provided by each school in its STARS report, to identify key mechanisms in their policy writing, implementation, and evaluation. The research questions I am addressing in this comparative approach are:

1. What mechanisms, policies, or programs were the most effective at producing measurable results?
2. Can these identified programs be implemented at other similar institutions?

Results and Conclusions:

STARS is publicly available and reviewed, and new reports are submitted every week. This ensures that data used for my research will be up to date and have a highly level of accuracy.

This research aims to further develop dialogue on energy policy and planning at higher education institutions while providing quantitative data to back up conclusions. The goal of this research is not to explicitly outline a single solution for various issues, but to increase information exchange of best practices and to highlight elements of successful energy strategies.