***Winners***

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| ***Undergraduate Project/Research***  **Grand Prize:**  Isaac Hayes, Western Carolina Evaluating Recycling in Two Classroom Buildings at Western Carolina University  **Honorable Mention:**  Shannon Bryson, Western Carolina Power Output of Flexible Solar Panels |
| ***Graduate Research***  **Grand Prize:** Steven de Jongh, UNC Charlotte Transmission-grid modelling for the prediction of renewable infeed and optimal storage placement  **Honorable Mention:**  Benjamin Hauck, UNC Charlotte Minimizing life-cycle costs and imbalance of PV-Systems for residential buildings |
| ***PhD Research***  **Grand Prize:**  Ashfanoor Kabir, NC State  Multilayer AC Winding: Electric Machine Design Approach for Improved Efficiency  **Honorable Mention:**  Sina Modaresahmadi, UNC Charlotte The Design of Magnetic Gears for Renewable Energy Applications |
| ***Graduate Project***  **Grand Prize:**  Sushant Shetgeri, NC State Integrated Sustainable Building Design for a Net-Zero Energy Building in Chile  **Honorable Mention:**  Daniel Pate, UNC Wilmington Developing A Solar Suitability Index for the Wilmington Metropolitan Area Using A Geospatial Multi-Criteria Evaluation |

*Grand Prize = $500, Honorable Mention=$100*

**Thank You Judges!**

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| Lauren Bishop  Gregg Marland  Jason Hoyle  Marie Hoepfl  Liz Bowen  Tracy Dixon  Mike Lizotte  Bob Powell | Jeremy Ferrell  Jay Blauser  Kathleen Stahl  Josh Brooks  Vicki Foust Jeff Ramsdell Brad Ives John Bonitz Greg Monty |