Malgorzata Aneta Marciniak* (mmarciniak@lagcc.cuny.edu), 4266 Phlox Place, Apt C7, Flushing, NY 11355, and Marina Nechayeva and Vladimir Przhebelskiy. Aspects of Calculus 3 in flexible solar panels and other renewable sources of energy.

Renewable sources of energy are not only trendy but can also serve as a source of topics for math projects in all levels of Calculus classes. In the past we experimented with aerodynamics and recently our offer got extended to wind turbines and solar panels with a strong emphasis on creativity. In the project that will be presented during the talk students design new shapes of solar panels and evaluate the energy collected through a sunbeam with a modified formula of the flux. The project uses Calculus 3 topics: surfaces, space curves, vector fields, and multiple integrals. (Received September 20, 2016)