Web-Based Farm Energy Assessment

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As energy prices continue to rise, so does the need to provide agricultural producers detailed information on how to make their farm energy efficient. In addition to individual concerns over energy use, the USDA's EQIP and CSP programs call for producers to analyze and enact energy efficiency planning. Resources for producers, as well as EQIP and CSP program representatives have been limited even with great interest in the issue.

With funds provided by a Conservation Innovation Grant (CIG), web-based farm energy self assessment tools have been created. The tools are intended to provide agricultural producers with a simple way to detail their farm's energy use as well as suggestions of energy conservation measures appropriate for their farm. Producers will be able to specify the type of agricultural enterprise they'd like to analyze, including dairy, beef, grain drying, greenhouse, irrigation, and potato storage. Each enterprise has a link to modules which look at energy consumption specific to the type of operation chosen. There is also a separate module to assess lighting. Renewable energy modules (in development) will include solar PV and thermal, wind and bio-gas.

The user is prompted with a series of questions specific to their enterprise, designed to take up to a half hour to answer. Based on user inputs, the web tool determines if the farm is a candidate for specific energy efficient or renewable energy generation technology.

Besides providing a means of self assessment of energy usage, the tool will also provide advice to producers which consider feasibility of installation, description of various technologies, as well as links to resources specific to energy use for a particular enterprise.

The presentation provided at the ACEEE Forum on Energy Efficiency in Agriculture provides just a glimpse at the web-based tool's energy analysis of farm lighting. This is just one of several types of enterprises the tool will be able to analyze. To use the tool, visit www.uwex.edu/energy/esa.

The energy assessment tools are currently available for use. We'd like your evaluation of the tools so we can improve the ease of use, presentation of information and understandability.