

Nebraska Center For Energy Sciences Research

Opportunities for Nebraska in Future Carbon Markets

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Abstract.

Concerns about global warming will lead to new regulations affecting greenhouse gas (GHG) emissions and, new opportunities for Nebraska enterprises to either sell or buy carbon offsets. This project will help prepare them for these opportunities by evaluating some of the technologies that may allow them to claim and sell carbon offsets. The project will report on how carbon markets will likely work, and will quantify the potential of new ethanol technology for combined heat and power (CHP) energy from biomass (corn stover or switchgrass) to mitigate greenhouse gas emissions and provide ethanol plants and farmers the opportunity to receive carbon offsets and sell them to Nebraska-based and other carbon emitters. The total potential value of such carbon offsets from the conversion of NE ethanol plants to biomass-powered CHP will be estimated for a plausible range of scenarios. Results of the studies will be made available to Nebraska GHG emitters and entrepreneurs through a website, and they will be published as journal papers.