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## FISCAL IMPACT REPORT

ORIGINAL DATE 2/10/2007

SPONSOR Papen LAST UPDATED \_\_\_\_\_ HB \_\_\_\_\_

SHORT TITLE NMSU Biomass Energy Research SB 699

ANALYST McOlash

### APPROPRIATION (dollars in thousands)

Appropriation		Recurring or Non-Rec	Fund Affected
FY07	FY08		
	\$1,078.0	Non-Recurring	General Fund

(Parenthesis ( ) Indicate Expenditure Decreases)

Relates to SB 463, SB 418, SB 221/HB 253, SB 309/HB 433, HB 430, and HB 188.

### SOURCES OF INFORMATION

LFC Files

#### Responses Received From

Energy, Minerals, and Natural Resources Department (EMNRD)

Higher Education Department (HED)

### SUMMARY

#### Synopsis of Bill

Senate Bill 699 appropriates \$1,078,000 from the General Fund to the NMSU Regents for expenditure in FY 2008 to contract for research on the potential development of biomass as an energy source.

### FISCAL IMPLICATIONS

The appropriation of \$1,078,000 contained in this bill is a non-recurring expense to the General Fund. Any unexpended or unencumbered balance remaining at the end of FY 2008 shall revert to the General Fund.

The appropriation appears to be for a single research contract through NMSU.

## **SIGNIFICANT ISSUES**

### EMNRD Analysis

The use of Biomass as an energy source has many advantages ranging from rural economic development to minimizing environmental impacts on air quality and diminishing water supplies. New Mexico has a broad base of biomass feedstock ranging from forest waste, municipal solid waste and dairy animal biomass. New Mexico's dairy industry boasts that they possess the largest average herd size in the United States. Manure management systems that can prevent pollution and produce energy are becoming increasingly attractive to the industry.

New Mexico State University (NMSU) is currently conducting a demonstration project that involves evaluation of a two-phase, bio-fermentation system to convert carbon in dairy manure to methane, produce electricity for on-site use, interconnect to the local utility, sell excess power to the grid and evaluate the reuse of the resulting solids as beneficial soil amendment.

This proposal of \$1,078,000 was not submitted to HED by NMSU for review, but is included in the Department's funding recommendation for FY08 as a non-recurring appropriation of \$140,000 for "bioenergy research and development."

The University lists, as one of its priorities, a \$1.0 million request from the NM Department of Agriculture and Office of Facilities and Services for a "Sustainable and Renewable Energy Research Development Program."

### **ADMINISTRATIVE IMPLICATIONS**

The appropriation will be administered as a contract with an unidentified external entity.

### **OTHER SUBSTANTIVE ISSUES**

According to HED, New Mexico's dairy industry is the largest cash-producing agricultural commodity in the state with an economic impact estimated at \$2.1 billion annually. However, the industry faces a big challenge in disposing of a high volume of waste in an environmentally and economically sound manner. The estimated 330,000 dairy cows in New Mexico produce almost eight million tons of wet manure waste annually.

Researchers from the NMSU College of Engineering and WERC: A Consortium for Environmental Education and Technology Development are developing a system that uses an anaerobic bio-digester to turn manure into energy and useful byproducts.

### **CONFLICT, DUPLICATION, COMPANIONSHIP, RELATIONSHIP**

SB 463 adds biomass-derived energy source to tax credit legislation.

SB 418 defines renewable energy, in part, as including biomass.

SB 221/HB 253 authorizes NM Finance Authority financing assistance for 20 alternative energy, biomass, or renewable energy projects throughout the state at up to forty-nine percent of project financing, not to exceed \$5.0 million.

SB 309/HB 433 enact the Land, Wildlife and Clean Energy Act that includes biomass as a clean energy development project and creates the Conservation and Clean Energy Bonding Fund.

HB 430 enacts the Advanced Energy Product Manufacturers Tax credit Act defining biomass as a renewable energy source for manufacturers' tax credits.

HB 188 enacts the New Mexico Renewable Energy Transmission Authority Act defining biomass as a renewable energy source and creates the Renewable Energy Transmission Bonding Fund and the Renewable Energy Transmission Authority Operational Fund.

BM/mt