

Contact: Anthony Girardi

**HIGHLIGHTED PROJECT REPORT – AG-BASED INDUSTRIAL LUBRICANTS (ABIL)  
AND ENVIRONMENTAL LUBRICANTS MANUFACTURING (ELM) - UNI**

**Action Requested:**

Receive the report.

**Executive Summary:**

The Economic Development Committee's work plan calls for the committee to receive a report at each meeting on a Regents enterprise program which is particularly effective in promoting economic development in the state.

Representatives of UNI's Ag-Based Industrial Lubricants (ABIL) research program and Environmental Lubricants Manufacturing (ELM) will make a presentation about these programs.

Presenters:

- Dr. Lou Honary, President of Environmental Lubricants Manufacturing and Professor & Director of Ag-Based Industrial Lubricants (on-leave)
- Randy Pilkington, Executive Director of UNI Business and Community Services

**Outline of the ABIL/ELM Presentation:**

The Ag-Based Industrial Lubricants (ABIL) Research Program is one of UNI's most successful technology transfer projects. The program was started in 1991 to study the potential utilization of soybean oil as hydraulic fluid. Hydraulic fluids research has led to the development of additional bio-based industrial lubricants. ABIL's successful progression to full commercialization developed in three phases:

- Phase I – 1st five years – feasibility testing of vegetable-based oils as industrial lubricants and development of first product
- Phase II – 2nd five years - product development (27 separate products were developed and tested, a few were licensed for commercial use)
- Phase III – commercialization and market acceptance
  - Initial license agreement
  - Start-up of Environmental Lubricants Manufacturing, Inc. (ELM)
  - UNI Foundation provided intellectual property to ELM in exchange for an equity stake and royalty payments
  - Growth of ELM – the company is profitable with 22 employees at its Plainfield, Iowa location and is capturing major segments of selected lubricants markets

Transition of ABIL to National Ag-Based Lubricants Center

- Becoming a Center of Excellence for research and market acceptance of biobased lubricants
- Evolving into a key infrastructure component for the nation's growing bioeconomy
- Developing national standards for biobased lubricants (in cooperation with CIRAS at Iowa State University)
- Establishing a national testing lab
- Assuming a key role in the development of Iowa's position in the bio-lubricant industry