



Alberta Energy  
Research Institute



# *COURSE*

*Core University Research in  
Sustainable Energy*

## **COURSE Leadership Board Meeting**

**Dr. Catherine Lareshen**

October 22, 2003

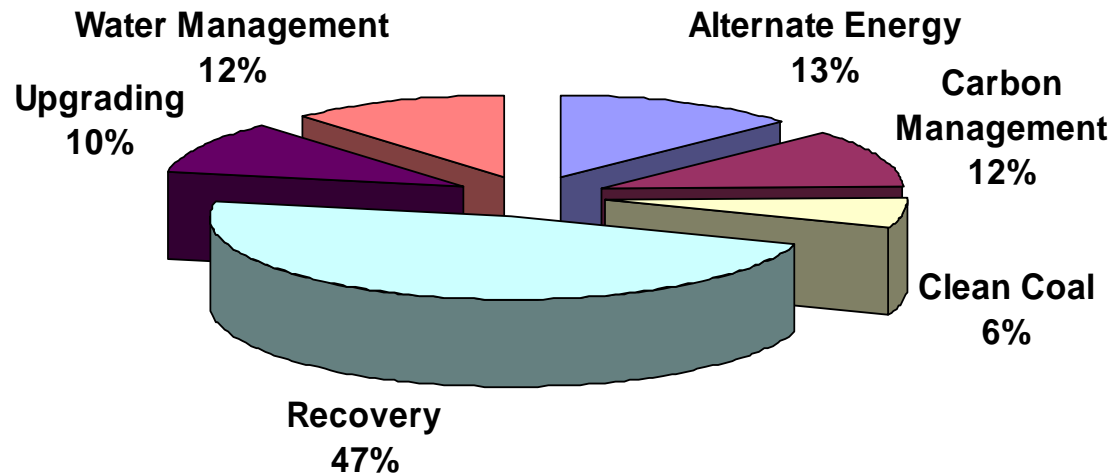


# COURSE Funding Competitions

- Five funding competitions have launched 85 new projects
- Total value of projects is \$23.8 MM, with \$12 MM provided by AERI, and the remainder from industry and other funding agencies
- Projects are in a wide range of energy-related areas



# 1999 – 2003 COURSE Portfolio





# The Challenge Dialogue

- AERI initiated Challenge Dialogue in January 2003
- Intent is to create a long-term strategy for ongoing collaboration between industry, universities, research providers, governments, and not-for-profit organizations in Canada and around the world to shape the energy research agenda
- Ultimate goal is for research to be applied to create economic, environmental, and social wealth for all Canadians



# The Challenge Dialogue Process

What is it?

Process for bringing together interested public and private sector partners from across Canada to determine how to

- Get more energy resources and value from these resources
- Do it in a way that protects our land, air, water, health and quality of life

Why do it?

Energy is critical to Canadians

- drives our economy
- Brings in external revenue that contributes to support essential social services

Can we afford to take energy for granted?

- Without significant technological breakthroughs we risk serious decline



## CD Process – Phase 1 (“Seeking Alignment”)

### *Launched in January 2003*

- 50 executives from industry, government and research community
- Face-to-face “alignment” meeting (March 27<sup>th</sup>)
  - Integrated approach
  - From “Research” to “Innovation”
- Work Teams
  - Vision and Mission
  - Governance and Innovation Management
  - Strategic Communications
  - Global Intelligence
  - Technology Application/Commercialization
  - Capacity Building



## CD Process – Phase 2 (“Moving Forward”)

- Completed (June 26<sup>th</sup>) - face-to-face Meeting
- Engaged 90 participants
- From “funding research” to initiating integrated “innovation programs”
- Closing in on:
  - Name: *Energy Innovation Network (EnergyINet)*
  - Shared Vision: *An abundant supply of environmentally responsible energy, creating economic prosperity and social well-being for Canadians*
  - Business Models: *EnergyINet Consortium of Funders*
- Next Steps (Fall of 2003)
  - Launching the first three priority programs



## EnergyNet (Cont'd)

- Priorities are:
  - ❖ Reduce costs and increase recovery
  - ❖ Improved resource conservation
  - ❖ Increased product quality
  - ❖ Innovations must reduce emissions, energy intensity and water intensity
- Best researchers available will be invited to participate in program networks, consisting of people and facilities



# EnergyNet Operating Principles

- Innovative mission-oriented approach
- Global perspective
- Focus on strengths
- Build on existing initiatives to add value and achieve shared goals
- Operate as integrated, collaborative network
- Quick to act
- All partners accountable for results
- Value diversity
- Balance market pull with technology push
- Capitalize on short-term market windows, and develop long-term securely-funded programs



## How Will This Affect COURSE?

- Strategic programs are being launched in Upgrading, Clean Coal/Carbon, and CO<sub>2</sub> Management
- We are proposing that funding for universities be included under the above program umbrella such that the overall funding will be greater than in previous years subject to AERI Board approval, an initial competition in 2004 will operate in areas not covered by the above.
- Depending on the success/delay in the launch, further competitions will be considered during the year.



## Proposed 2004 Competition

- If approved by AERI Board, 2004 COURSE Competition will run as in previous years.
- Deadline date is January 31, 2004.
- Estimated funding level is \$2 million (depending on AERI Board allocation)
- Applications from the non-EnergyINet strategic programs:
  - Improved Oil Recovery
  - Alternative Energy
  - Water Management



## Project Areas for 2004 COURSE Competition

- Improved Oil Recovery
  - Conventional Oil & Gas
  - Enhanced Oil Recovery
  - Coalbed Methane and other Unconventional Gas
  - Bitumen, and Heavy Oil
- Alternative Energy
  - Fuel Cells
  - Hydrogen
  - Bio-energy and Bio-Products
- Water Management
  - Energy related water projects for tailings management, oilfield re-use and recycle, and CBM water issues.