

CENTRE FOR
**ENERGY ASSET
MANAGEMENT STUDIES**

CEAMS & the Energy Asset Management Education Program

Presentation to PASC Members

June 16, 2010

Founding Partner Companies & Associations



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Supporters

Alberta Energy



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Human Resources
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ressources humaines
de l'industrie du pétrole



CENTRE FOR
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CEAMS

- CEAMS is a non–profit and independent Centre influencing and promoting Energy Asset Management skills development for the energy industry
 - **Vision**: Recognized for the creation and advocacy of Energy Asset Management as a profession
 - **Mission**: Promote Energy Asset Management education programs and careers for the energy sector
- Currently: focused on the development of a Diploma Program at SAIT and with a future focus involving increased:
 - access to program material
 - involvement of industry Associations
 - awareness by industry of the EAM Diploma Program and program graduate capabilities



What is Energy Asset Management (EAM)?

The management and administration of regulatory, financial, and contractual compliance pertaining to energy assets

Energy Asset Management

Mineral Land

Surface Land

Joint Ventures

Well Asset Management

Operations & Production
Accounting



Business Case

Increasing Demand	Limited Supply Funnel
<ul style="list-style-type: none">• Declining number of adequately trained people entering EAM disciplines; many retiring in 3 – 8 years• Compliance increasingly critical (Shallow Rights Reversion, New Royalty Framework, Transitional Royalties, Bitumen-in-kind)• Increased pressure on all areas of EAM due to industry evolution	<ul style="list-style-type: none">• Current continuing education programs are function-specific; doesn't address need for integrated knowledge and current industry needs• No formal post secondary programs offered by educational institutions in the EAM disciplines



Current Situation

Costly Impact	Business Processes
<ul style="list-style-type: none">• Overheads not charged or incorrectly charged• Service agreement fees not charged or incorrectly applied• Revenue on production not received• Royalties incorrectly calculated• Royalty deductions inaccurately applied	<ul style="list-style-type: none">• Over payment of property tax• Road usage not billed• Inaccurate JV billings due to out of date DOIs• Late filing and transfer charges• Freehold mineral tax• Regulatory compliance



Energy Asset Management Program (EAM)

- Program based on asset life cycle focusing on EAM disciplines, supplemented with general business courses
- Program is approved by AAE&T and qualifies for student loans
- Program is “user-pay” with potential for future Government funding
- Appropriate laddering and accreditation of program to allow transfers in, out, and between institutions
- Target audience: high school students, mature students, and those making career changes



Energy Asset Management Program (EAM)

Original 3 Phase Development:

a) 2 year Diploma

- start date Sept 2009

b) 2 year Applied Degree

- pending AAE&T approval
- 4th year to include 8 month work term in industry

c) Online Courses/Certificate

- targeted start date 2010



Energy Asset Management 2-year Diploma

Semester 1	Semester 2	Semester 3	Semester 4
COMM 256 -- Professional Communications and Presentation Skills	COMM 266 -- Professional Communications Skills II	ECON 300 -- Economics	ACCT 325 -- EAM Accounting
BCMP 210 -- Business Information Communication Technology Systems	DATA 250 -- Data & Records Management	MKTG 301 -- Oil & Gas Marketing	ORGB 353 -- Organizational Behaviour
BLAW 205 -- EAM - Business Law	BMAT 252 -- Financial Decision Making	EAMG 300 -- EAM Maintenance	EAMG 350 -- EAM Production
INRY 215 -- Energy Industry Introduction	EAMG 250 -- EAM Pre Acquisition & Acquisition	EAMG 305 -- EAM Production Facilities	EAMG 355 -- EAM Abandonment & Relinquishment
EAMG 200 -- Overview of Energy Asset Management	EAMG 255 -- EAM Drilling & Completion	EAMG 310 -- EAM Project Preparation	EAMG 360 -- EAM Capstone Project



Energy Asset Management Diploma

First Semester

COMM256: Personal/professional communications and selection of appropriate software to convey intended messages.

BCMP210: Introduction of communication technology including systems, network security, internet policies, ethics of proprietary information, and emerging business technologies.

BLAW205: Overview of the history/development of the Cdn legal system, focusing on oil & gas law.

INRY215: Overview of the petroleum industry and Canada's role on the world-wide stage.

EAMG200: Overview of EAM and the interdependencies between the non-technical and technical disciplines in the petroleum industry.



Energy Asset Management Diploma

Second Semester

COMM266: Advanced communication skills in business writing, collaboration, digital tools, and effective meeting management.

DATA250: Fundamental concepts, terminology, and scope of data records management related to EAM disciplines.

BMAT252: Financial decision making involving practical applications of math techniques for solving business problems.

EAMG250: Overview of preparation involved in acquiring land as well as the decision making and work processes involved in attainment of assets.

EAMG255: General understanding of drilling and completion field processes and specifically EAM functions during this phase of an assets lifecycle.



Energy Asset Management Diploma

Third Semester

ECON300: Economic principles used to analyze problems in the oil and gas sectors of the Canadian economy.

MKTG301: Marketing concepts as related to the oil and gas industry, including world wide influences and their impact on prices.

EAMG300: Practical application of support to maintain oil and gas assets and meet contractual/regulatory obligations.

EAMG305: Understand production facilities and infrastructures to prepare and transport a quality product to market.

EAMG310: Introduction to project management, research, and group work within EAM interdisciplinary teams.



Energy Asset Management Diploma

Fourth Semester

ACCT352: Bookkeeping, journalizing, posting to ledgers, completing a trial balance, preparing financial statements and introduction to operations and production accounting.

ORGB353: Fundamentals of organizational structures, operations, conflicts, problem solving, and managing change.

EAMG350: Production activities including field operations, stakeholder relations, regulatory compliance, reporting, and royalties.

EAMG355: Processes and obligations of returning land to the pre-development state and surrendering or selling mineral and access rights.

EAMG360: Integrate business process management and EAM interdisciplinary activities and processes within a final capstone project.



Current Status of EAM Program

- Sufficient funding raised from industry for development of the Diploma
- First year of the Diploma program completed at SAIT, April 30 2010 with 62 students; full enrollment of 64 students expected for 2010-2011 calendar year
- Second year of Diploma development completed
- Increased interest in EAM from industry Associations
- Discipline specific training to be developed in conjunction with Association supported/delivered courses/certificates



EAM Diploma Graduates Capabilities

- Understand the energy business; functions and responsibilities of departments and disciplines
- Broad understanding of industry regulations and compliance
- Understand terminology and key business concepts
- Excellent general business skills
- Ready for specific discipline learning and development



EAM Student Employment Opportunities

EAM students are capable of working in junior positions:

- Mineral Lease Analyst
- Joint Venture Analyst
- Surface Lease Analyst
- Well Analyst
- Fee Title Analyst
- Operations Accounting
- Field Offices
- Administrative roles

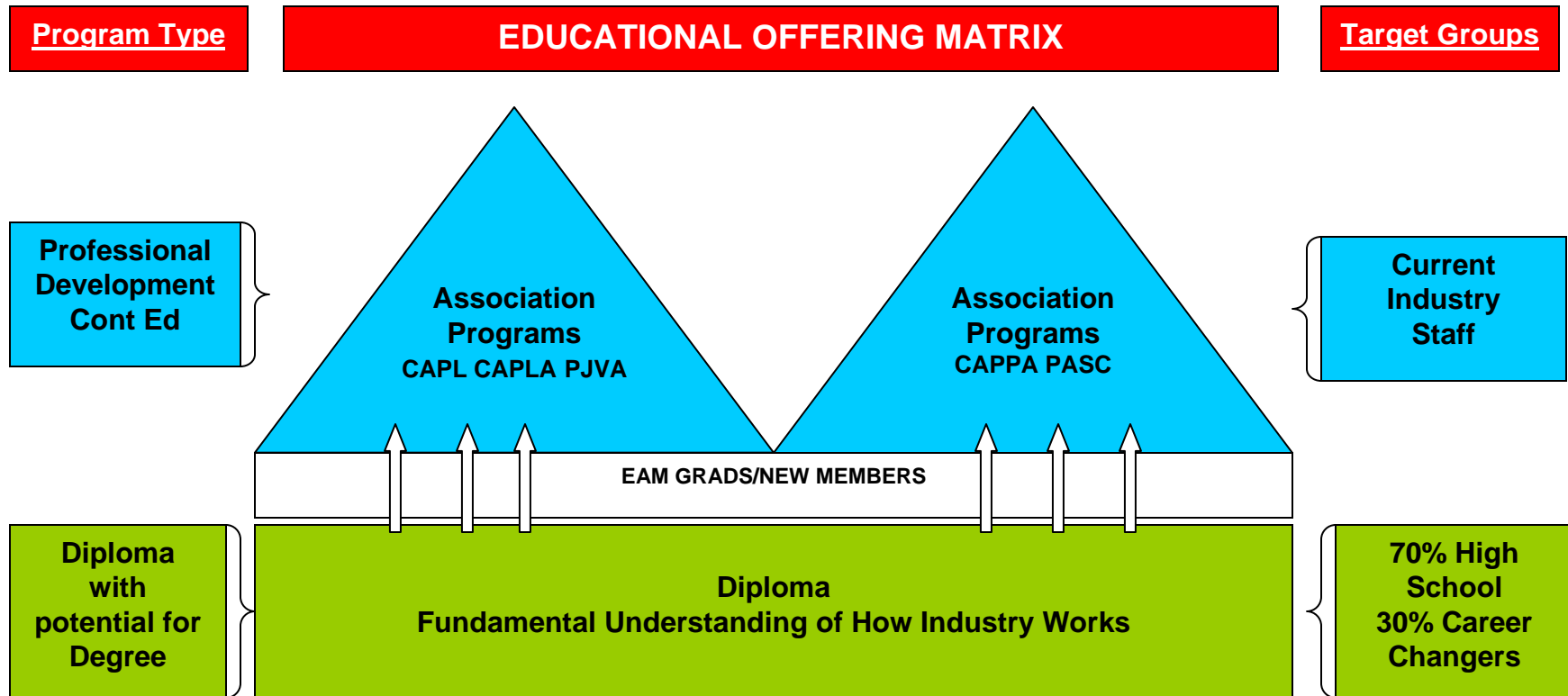


EAM and Association Programs

- EAM Diploma is a foundation program:
 - Overview of energy industry
 - Understanding of key business processes
 - General business knowledge
- Diploma graduates will be “industry ready”
- Graduates are future Association members
- Association programs focus on professional development – just-in-time training, discipline specific skill development, and dissemination of subject specific knowledge
- EAM Diploma + Association Courses = “job-ready” talent



Where Does SAIT EAM Program Fit?



Where do we go from here?

CEAMS would like to work closely with PASC (and all Associations) to:

- Encourage PASC members to promote the hiring of students from the EAM program within their companies
- Ensure EAM program graduates are meeting industry needs
- Promote growth in EAM Association memberships through EAM students/graduates
- Increase awareness of the EAM Diploma program to the PASC membership
- Work cooperatively and collaboratively to minimize overlap and eliminate gaps in the collective instructional matrix

