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## Cost Benefit-Analysis of Energy Demonstrations

Regnier, Eva; Franck, Raymond; Nussbaum, Daniel

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# ENERGY ACADEMIC GROUP

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## Policy and Analysis Projects

NPS Energy Academic Group > Research

### COST BENEFIT-ANALYSIS OF ENERGY DEMONSTRATIONS

— RESEARCH PROJECTS —

#### Prof Nussbaum, Prof Regnier, & Prof Franck

Operations Research Dept, Defense Resources Management Institute, Graduate School Of Business And Public Policy & Department Of Systems Engineering.

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#### Description / Objective

- The goal of this project is to develop tools to evaluate the benefits and costs of technology demonstration projects for the E-STEP program
- Provide economic and cost analysis support to agencies participating in ESTEP, including
  - Benefits and costs include those directly attributable to the demonstration and
  - Benefits of information derived from demonstration projects and
  - Potential benefits of the technology if successful and widely deployed

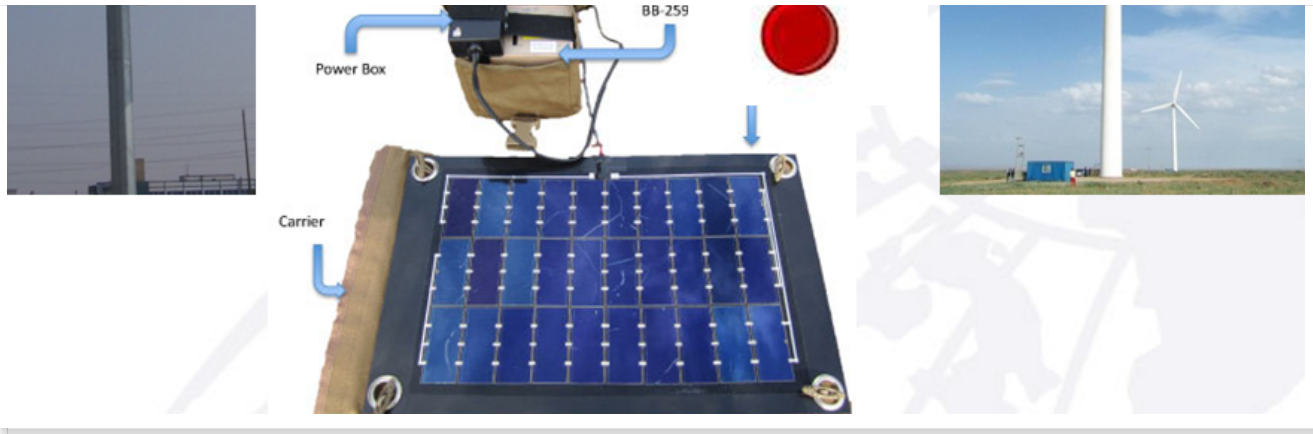
#### Approach

- Analytic techniques including:
  - cost-benefit analysis
  - return-on-investment
  - investment valuation, and
  - option value analysis
- Education and Learning Opportunities:
  - MS Theses
  - Integration with NPS Energy MS degree and executive education curricula
- Collaboration with demonstration project teams

#### Expected Products / Payoff

- A toolbox of cost and economic analyses that permit evaluation of the ROI of energy demonstration projects
- Methods for assessing value of non-monetary benefits of energy technologies for Navy mission-critical energy services
- Investment valuation tools adapted to Investment valuation tools for mid-range TRL technologies
- Return-on-investment support for E-STEP technology demonstration projects
- Development of Navy energy professionals with analytic capabilities and experience





Budget (\$K)	FY12	FY13	FY14	FY15	Total
Contract(s)					
Support	100	225	250	250	825
Total	100	225	250	250	825