Efficiency Performance Contracting

Reducing Wastes and Costs through Innovative Supply Contracts

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Traditional Chemical Supply

Sales (revenue)

Chemicals Supplied (costs)

Increasing Chemical Volume

PROFIT!
Chemical Management Services (CMS)

Fixed fee (revenue)

Chemicals supplied (costs)

Increasing Chemical Volume

PROFIT!

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Another important feature...

Core Competence

“The key skills or knowledge needed to build and maintain a competitive edge.” (Quinn 1994).

Many technologies lie outside the core competence of the business, so time and money go elsewhere.
Typical Spend in Key Non-Core Areas

- Tooling: 35%
- Electricity: 32%
- Nat. Gas: 12%
- Paint: 10%
- Chemicals: 6%
- Wst&w tr: 5%

Total spend: $0.5 – $2 million/yr
Energy spend: $0.2 – $.9 million/yr
Can multiple spends be grouped under one supplier (or alliance of suppliers) to support an efficiency performance contract?
General structure of an efficiency performance contract (EPC) for small and medium enterprises (SMEs).
Candidates

Tooling – plus chemicals and possibly electricity.

Tooling
Management
Contracts
Candidates

Paint – plus chemicals and possibly natural gas.

Paint Management Contracts
Candidates

Energy

Energy Management Contracts

- Tooling: 35%
- Paint: 10%
- Wst&w tr: 5%
- Natural Gas: 12%
- Electricity: 32%
- Chemicals: 6%
Our Research

with Dan Marsch of ISTC

Work with SMEs and suppliers to initiate pilot projects.
Tooling management very successful, but not able to expand into chemicals.

Paint management – suppliers were not sufficiently interested.

Energy management still promising.
Plant A

Metal products fabricator for auto industry.

Employees: 120
Square footage: 130,000

Tooling management successful
Incorporating coolant was not.
Plant A – Tooling management

Figure 6. Moving yearly average tooling cost-per-unit produced under the tooling management program (August 2004 is baseline).
Plant B

Metal products fabricator for heavy equipment industry.

Employees: 450
Square footage: 125,000

Tooling management successful
Incorporating coolant was not.
Plant C

Metal products fabricator for heavy equipment industry.

Employees: 35
Square footage: 40,000

Tooling management good start.
Then plant closed.
Plant D

Metal products fabricator for heavy equipment industry.

Employees: 400
Square footage: 225,000

Tooling management pursued
But chose 2 suppliers, included no efficiency incentives.
Results

Tooling management very successful, but not able to expand into chemicals.

Paint management – suppliers were not sufficiently interested.

Energy management still promising.