ENERGY AND UTILITIES CASE STUDY

ENERGY COMPANY BACKGROUND
One of the largest suppliers of energy and materials handling services in New England with products including: home heating oil, diesel fuels, residual fuels, gasoline and natural gas. Over the years this company has aggressively expanded upon its fuel procurement, handling, and delivery expertise. The company's unmatched network of strategically located deep-water terminals also makes it industry's choice for liquid and dry bulk material handling services

CHALLENGES FACED
- **Lack of a consolidated and cohesive Risk Tracking and Reporting System**
  Existing reporting and risk tracking system is unable to provide consolidated information and financial forecasts for all of the company's business lines like Natural Gas, Coal, and Petroleum Products.
- **Lack of Integrated Business Processes**
  The different processes in existing system are not integrated and they make the interaction between the customers and the company's services and products very complicated. The customer information is also incomplete.
- **Lack of Automated Streamlined Processes**
  Existing system processes are not streamlined and automated. They provide incomplete sales and purchase information about the inventory, scheduling, pricing, billing and transportation of its various products like coal, natural gas and refined products.

SOLUTIONS PROVIDED
- **Consolidated and Cohesive Risk Tracking and Reporting System**
  A consolidated and cohesive system for the company's entire product lines which provides reports about risk tracking information on
  - Curves/Pricing.
  - Position/MTM report by total, timeframe, product, Book/Strategy, Deal, What-if analysis, Monte Carlo simulations, Real-time Position Engine
  - Credit information like
    - Credit limits of customers and when they exceed the credit limit assigned, and track exposure to the company's counterparties including the counterparty's credit limit for this company.
    - Show net exposure across commodities to trading partners and monitor 2 months rolling credit exposure on a customer level, including out-month exposure.
  - Detailed reports about new deals, closing, rolling, curve shift, time decay, interest rate shift, and volatility shift.

- **Efficient Integrated Business Processes**
  An efficient integrated business process which is clear and easy to use by both this company and their customers. It stores the customers personal profile and also provides complete customer information like

    o Different deals made with the company's various product lines
    o Requirements in the areas of product specifications, transportation, scheduling, inventory, receipts, billing and pricing.
  The customers are also provided with the company's information about
    o Its various products and the deals available with each product and its pricing, selling, inventory, transportation and other related information.

- **Automated Streamlined Processes**
  Automated and streamlined various processes involved in the sales, purchases and handling of materials resulting in increased productivity.
  In the **Refined Products Business** Line
    o Alerts have been provided to track deals, contracts, transport, nomination, quantity, rates, receipts and updates.
    o The inventory reporting requirements like the tank volumes, subtotal by product, discretionary net bbls, contracted net bbls, exchange partner net bbls, subtotal of all exchange partners net bbls and total net bbls lifted by product, inter-terminal transfers and intra-day values for all the above have been met.
    o Methods to perform blending of fuels have been incorporated.
    o Shipping details and associated time restrictions and the various charges involved and the invoicing have been incorporated.
  In the **Coal Business** Line
    o The processes involving the various deals, and customer requirements about their product specifications, transportation, scheduling, inventory, sales, receipts, pricing and billing have been automated.
  In the **Natural Gas Business** Line
    o The processes involving buying and selling, the deal types and their various terms, receipts and deliveries, transportation, storage pricing have been automated

TECHNOLOGIES USED
- Business Intelligence with Crystal Reports 9
- Tibco Portal Builder with LDAP SunOne Directory Server
- ASP.net, VB.net and C# with SQL 2000 database

BENEFITS REALIZED
- Effective risk tracking and structured reporting system provided market analysis and long term financial forecasts
- Integrated business processes helped this company enrich customer relationships and improve business.
- Cost saving automated streamlined processes improved organizational productivity and profitability.