Performance Contracting Approach for Energy Projects

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Agenda

- Concept of Performance Contract
- Our Approach
- Key Element - Innovation
- Business Environment
- Case Study
- Conclusion
Concept of Performance Contract

- Paid upon you saved
- No or little upfront cost depends on the package

Energy bill

ESCO

Energy bill

Owner

During PC

After PC
Economical Impact – Performance Contracts

Major steps in performance contracts

- Building up the baseline energy consumption
  - Open and partnering approach – win-win situation

- Formulating the corresponding energy adjustment factors
  - Few variables approach

- Measuring and calculating (M&V) the energy performance
  - Simple and easy understanding approach
Approach for PC

- 4Ps Principle
  - Package Solution
  - Performance Guarantee
  - Professional Measurement & Verification
  - Partnering
Key Element - Innovation

- Application of new Technologies
- Total Solution approach
- The CORE Theory
  - Curiosity
  - Open-mindedness
  - Risk
  - Energy
Business Environment - Favourable

- High energy cost
  - Oil
  - Coal
  - Natural Gas
  - Electricity
Business Environment - Favourable

- High Technologies
  - Cooling Towers & high COP chillers
  - LED lightings
  - High efficiency heat pump
  - CO₂ heat pump
  - Induction cooking
Business Environment - Unfavourable

- Low Interest Rate
- High Inflation – material and labour cost
- High cost in new technologies – long payback e.g. Renewable energy

For the case of HK
- Weak Currency
- Relative energy costs
Case Study – Hot Water System in Hotel

- Replace diesel plant with electric heat pumps
  - High diesel cost
  - Total Solution including transformers and capacitors upgrading works
  - Electricity Tariff benefits
Case Study – Steam Generation in Factory

- Install new electric steam generators for new production lines
  - Increasing gas/diesel cost
  - Total Solution including electricity upgrade with new high rise transformer rooms
  - Innovation: On-peak and Off peak demand control
Conclusion

- PC – an innovative financial tools for energy projects
- Overcome high initial cost
- 4P approach for successful PC
- Innovation in energy solution
- New Technologies help PC
- Recently the market for PC is not very favourable
- Business Environment affected by a lot of factors e.g. energy cost, interest rates and inflations
- Flexibility - adjust our business dependence on PC when economy situations are not favourable