

EPC Seminar

How to manage Risks as an
Energy Performance Contractor

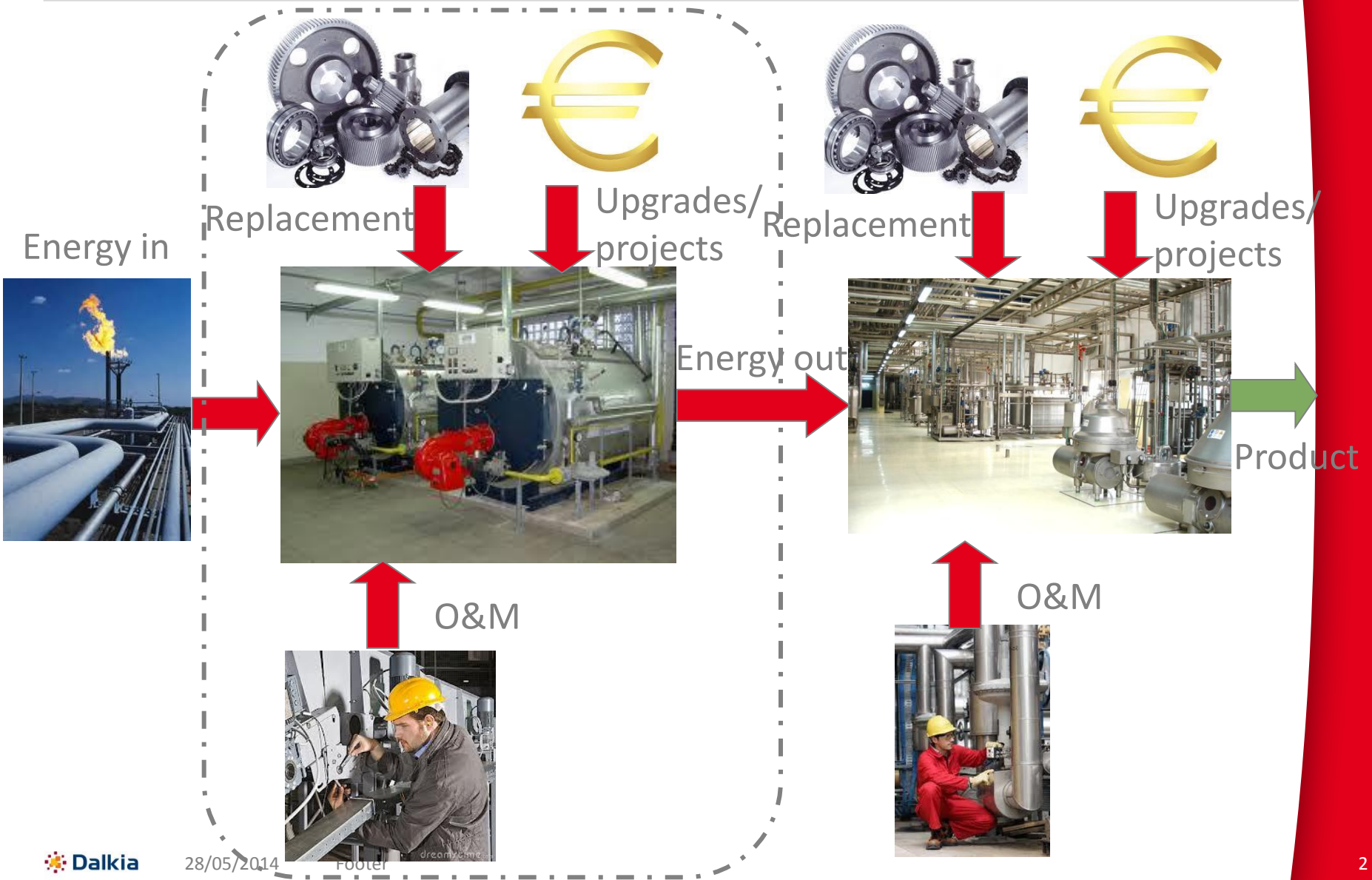
28th May 2014



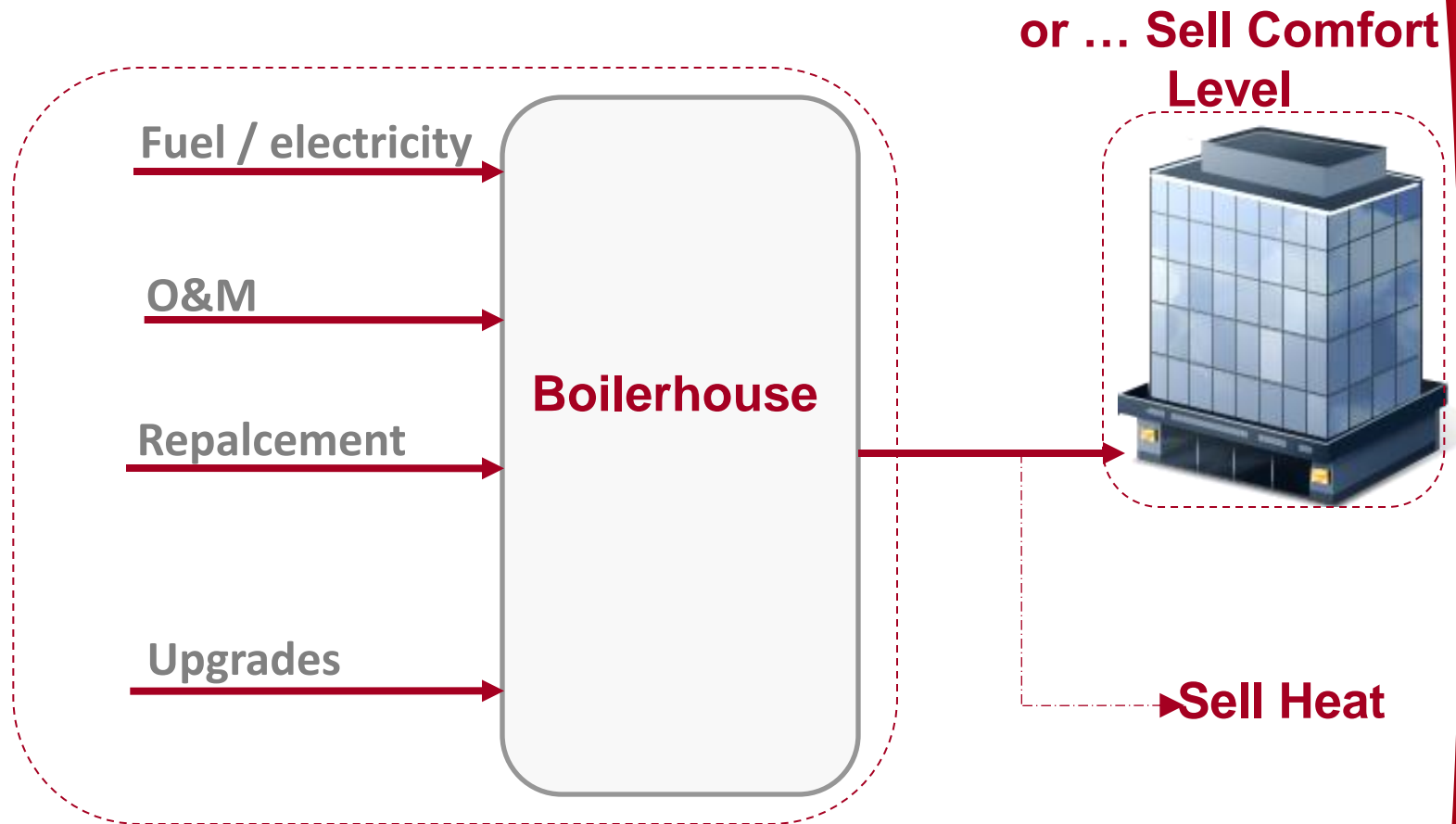
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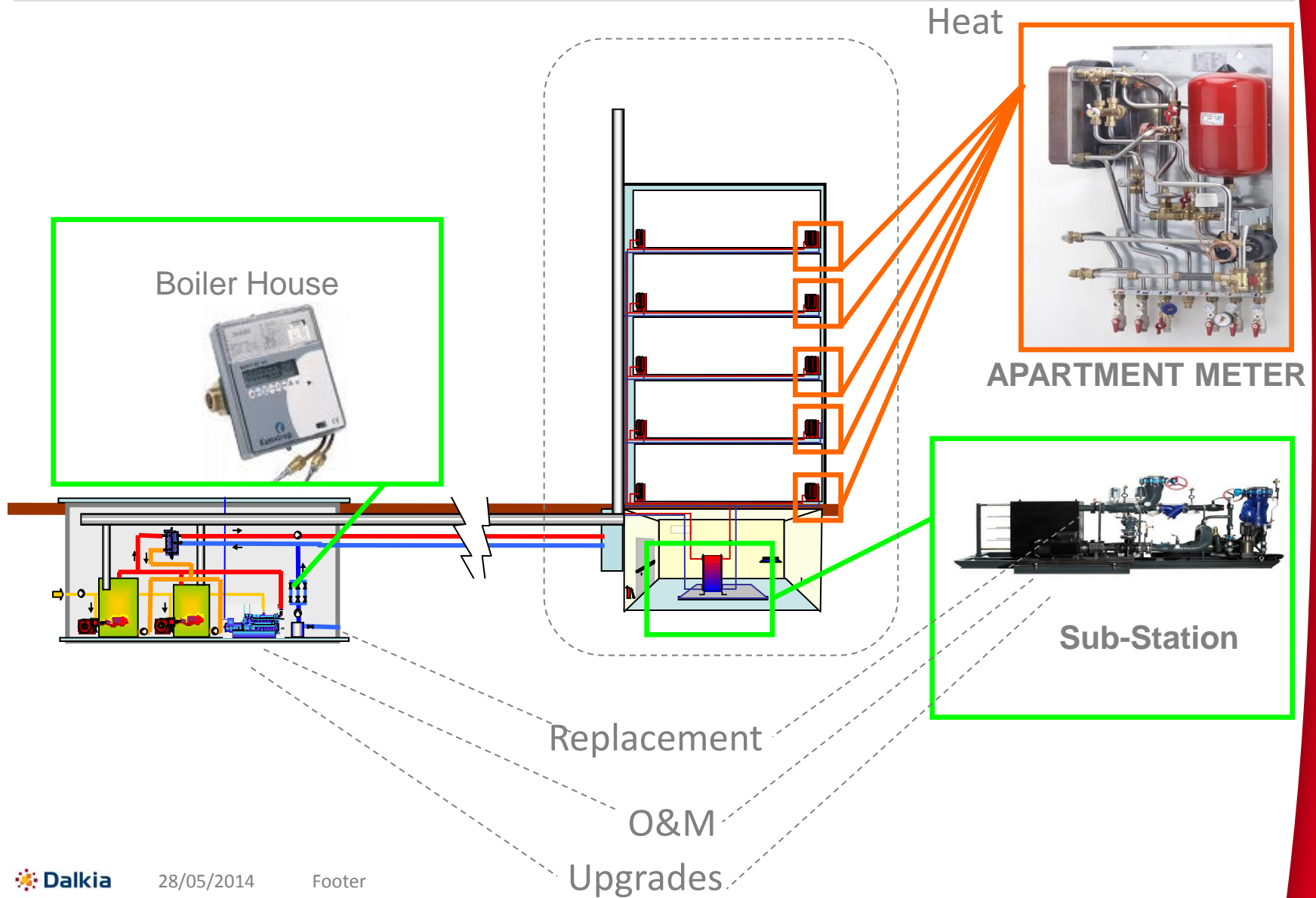
What is EPC?: Industry



What is EPC?: Buildings



What is EPC?: District Energy



Energy Performance Building Blocks



Utilities Sale



O&M



Extended Warranty on Utilities Plant



Utilities Financing

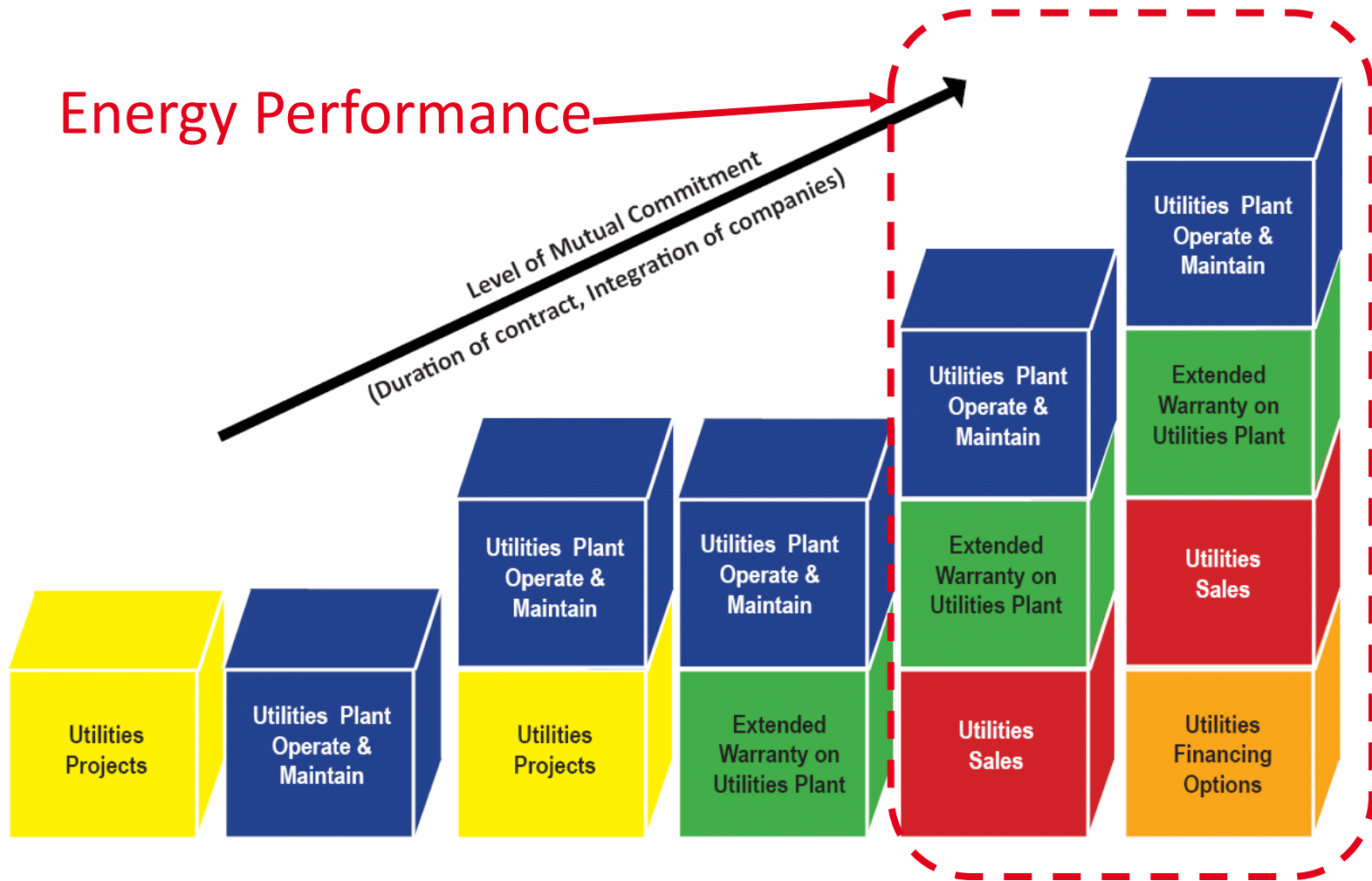


Utilities Projects

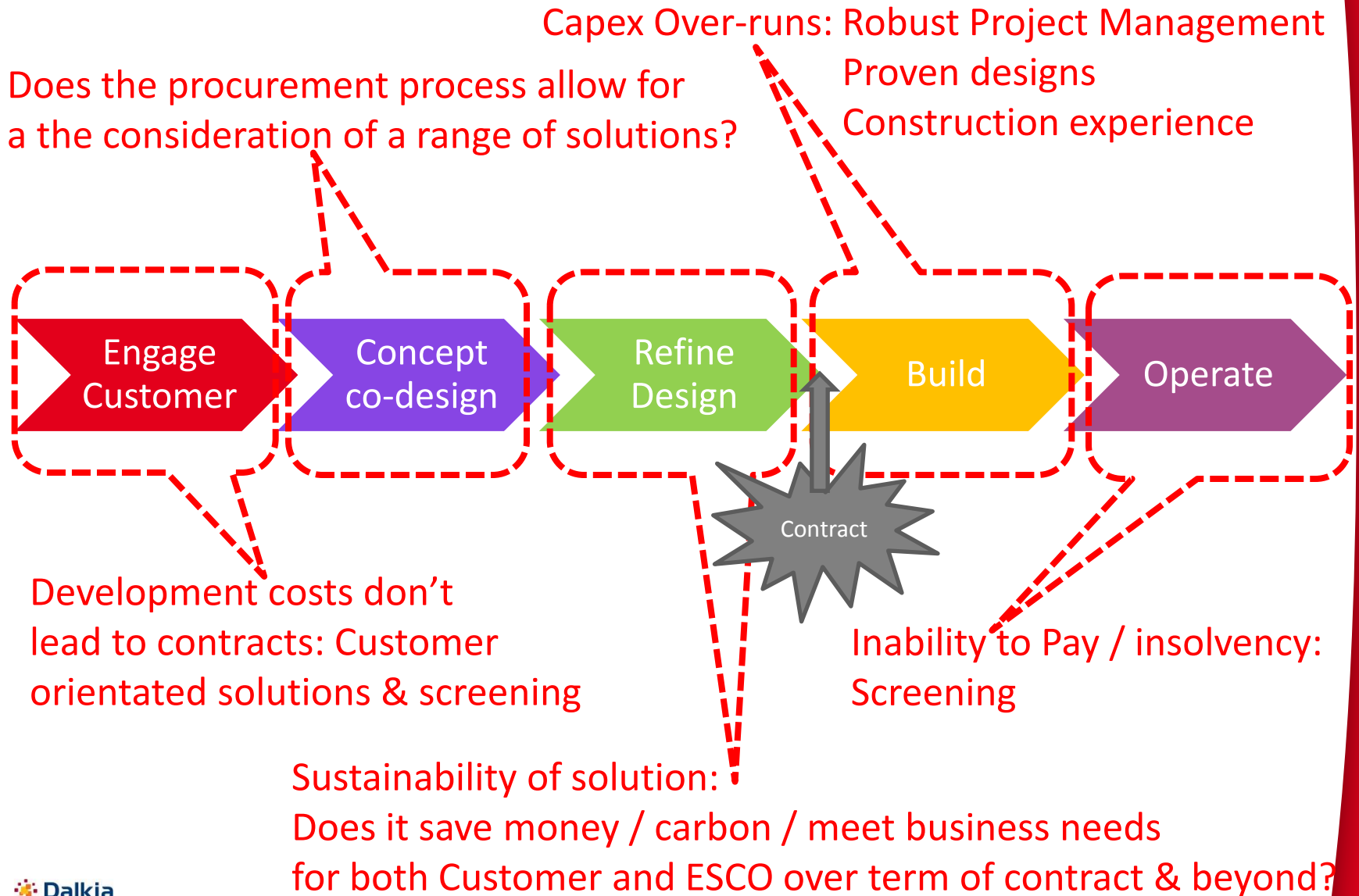
Energy Performance: Bundling



Energy Performance



Development Risks

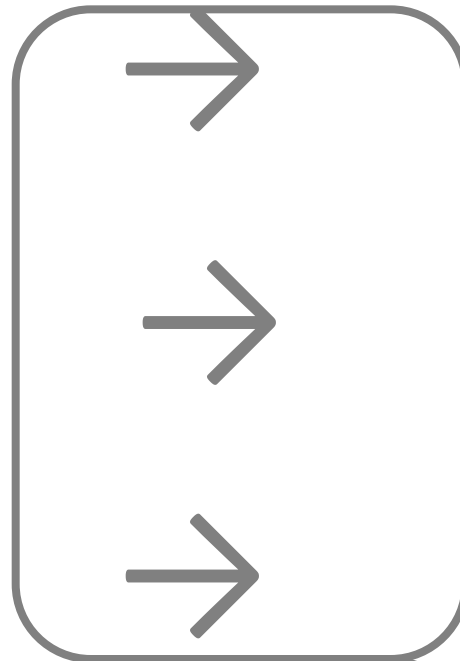


Operational Key Technical Risks

Fuel

Electricity

Electricity



Steam / hot water

compressed air

Cooling

Efficiency

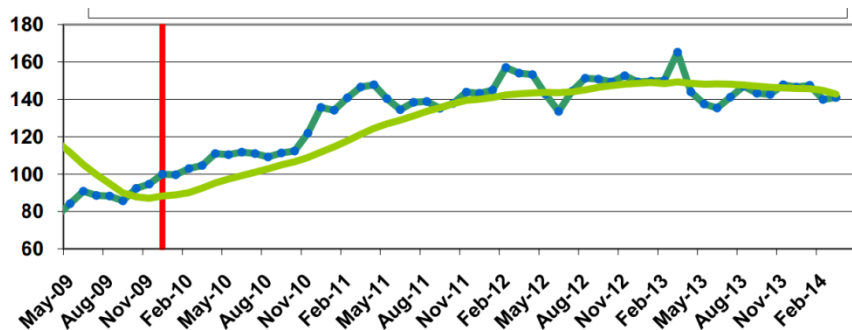
Availability

Operational
Cost

Output

Risk transfer from client to ESCO ...but under ESCO control

Input Energy Risk



Energy in

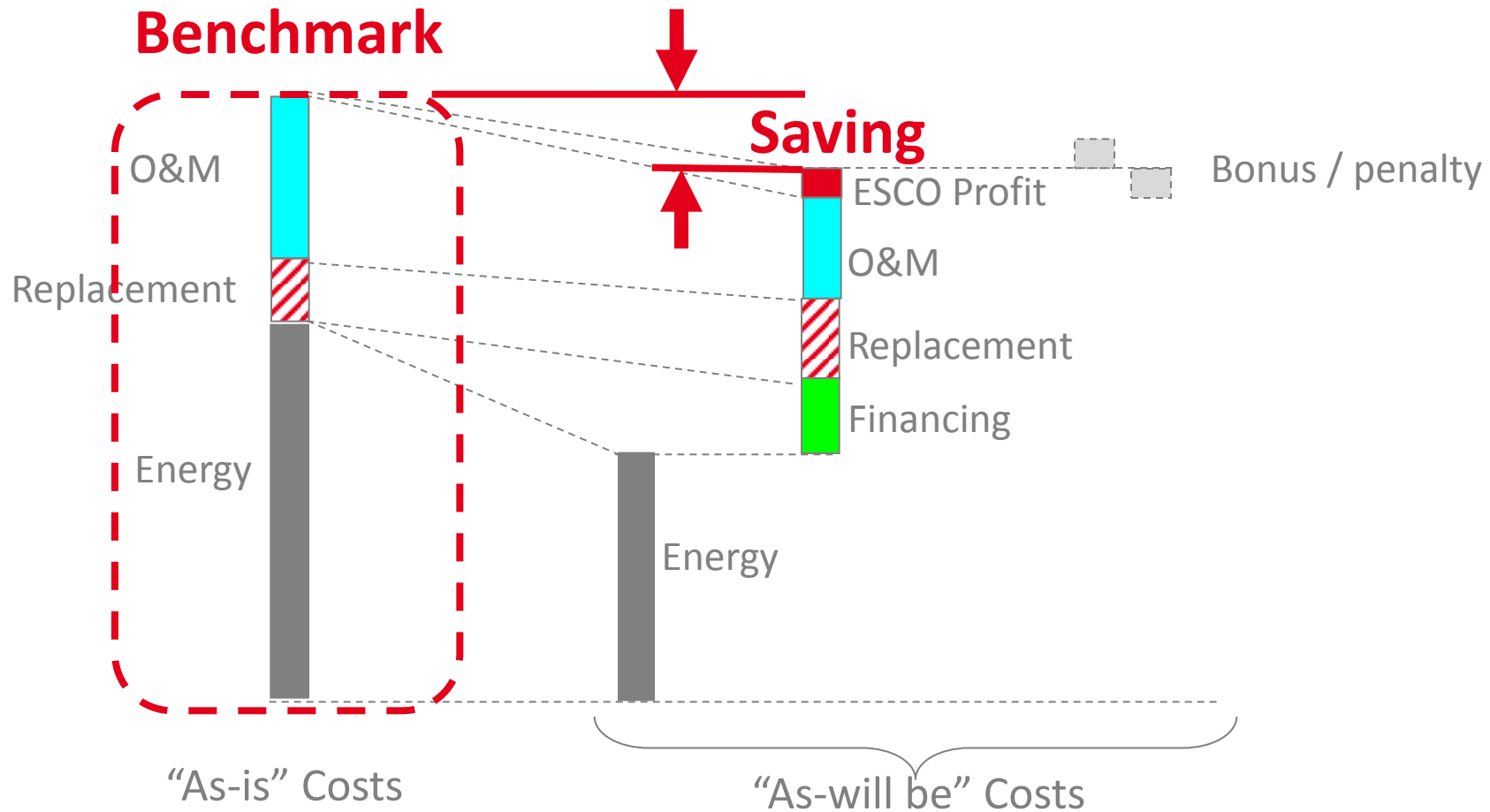


Energy out



How does ESCO manage input energy risk?:
It doesn't, if it doesn't have control

Risk on Savings Delivery:

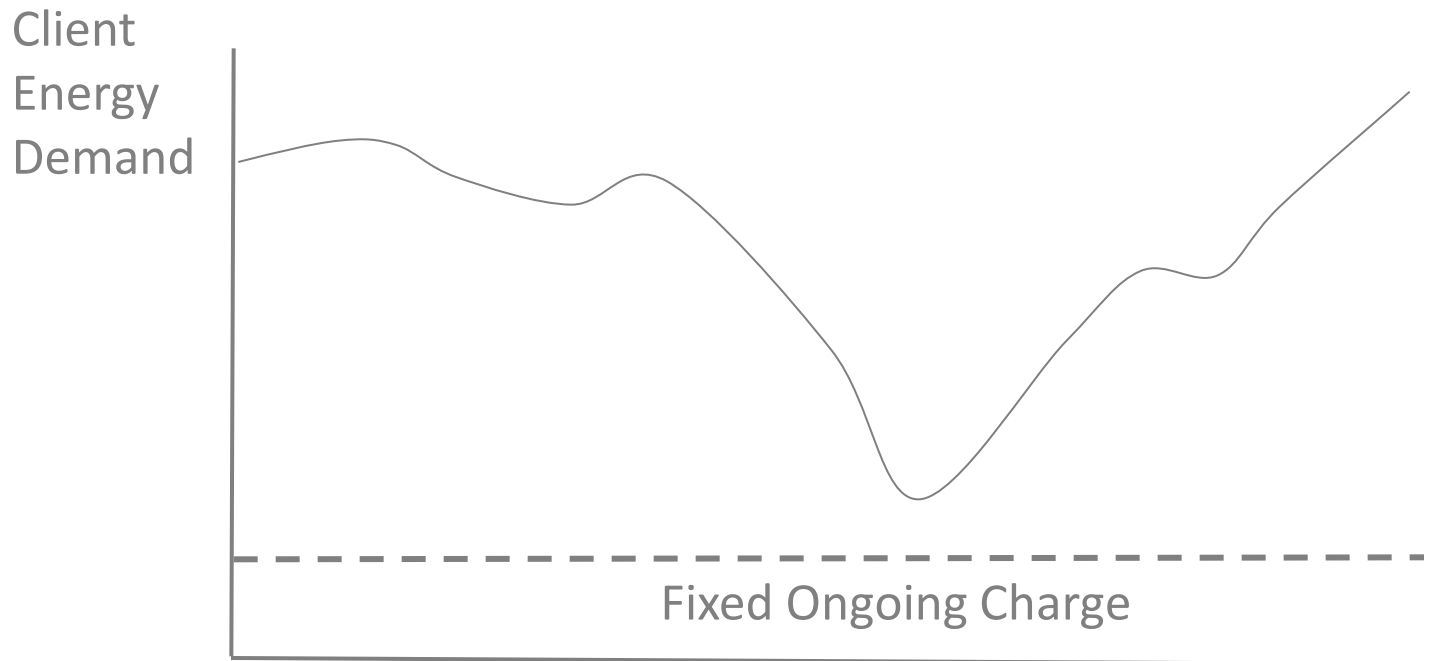


Risk managed through knowledge of process / technology
... and overall contract liability



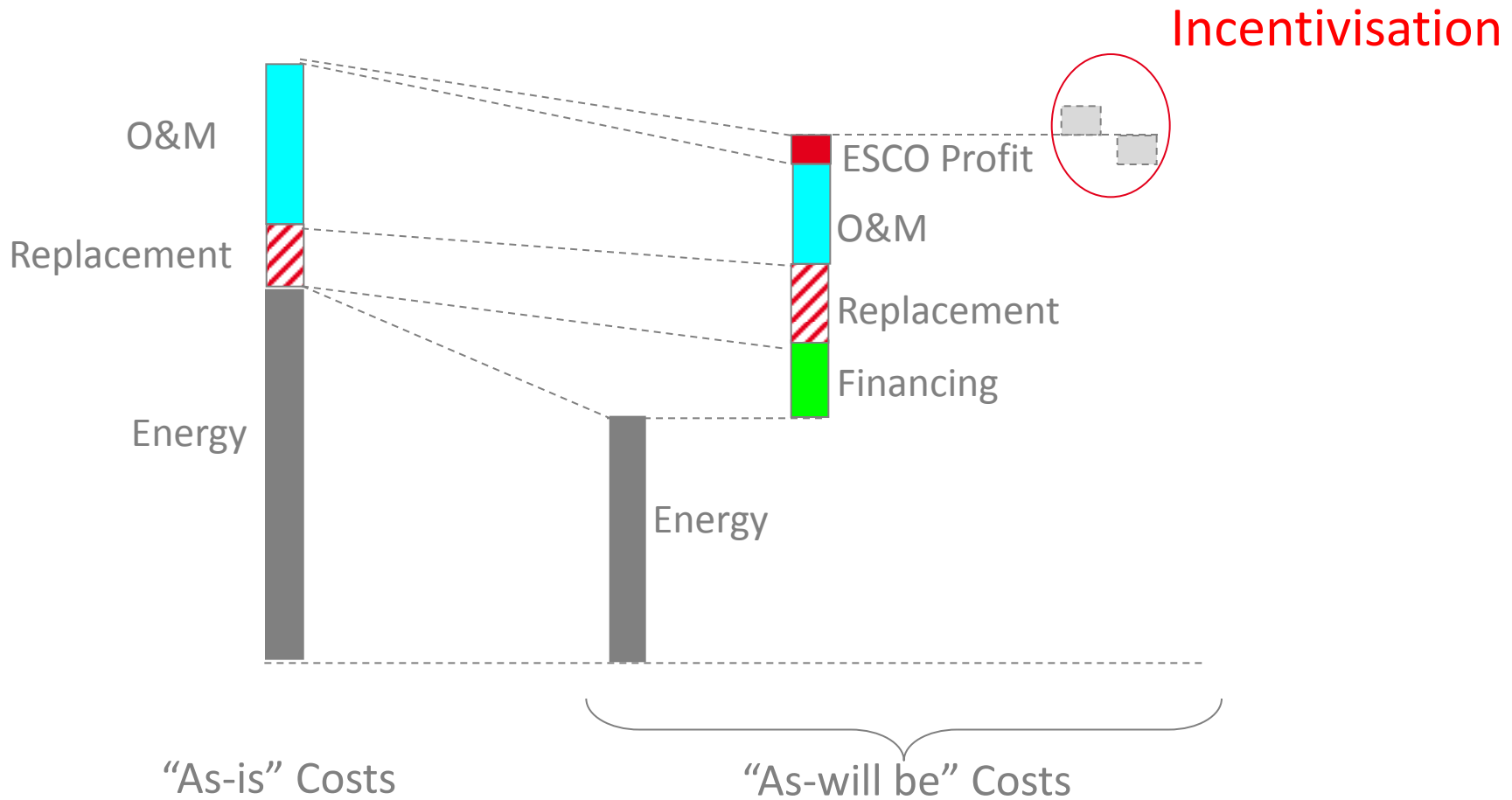
Risks on Volume Off-take

- Risk that consumption of energy reduces, which exposes ESCO investment as a stranded asset



Risk can be managed through separate energy use charge & separate fixed charge

Risk on enhancing performance over contract life



Incentivisation, and balanced benefit to all parties



Conclusion

- Risks controlled by ESCO, best sit with ESCO and are best managed by ESCO
 - Typically all technical and operational risks
- Commercial risks dealt with in contract – usually shared
 - Limitation of liability, default, asset ownership etc.
- Not all risks should (or even can) be managed by ESCO
 - Input energy and ESCO default
- ESCO contracts are typically moderate risk, and modest reward
 - Correlation between ESCO risk and ESCO reward

Thank You...Any Questions?

