



Training Experiences in Industrial Energy Efficiency

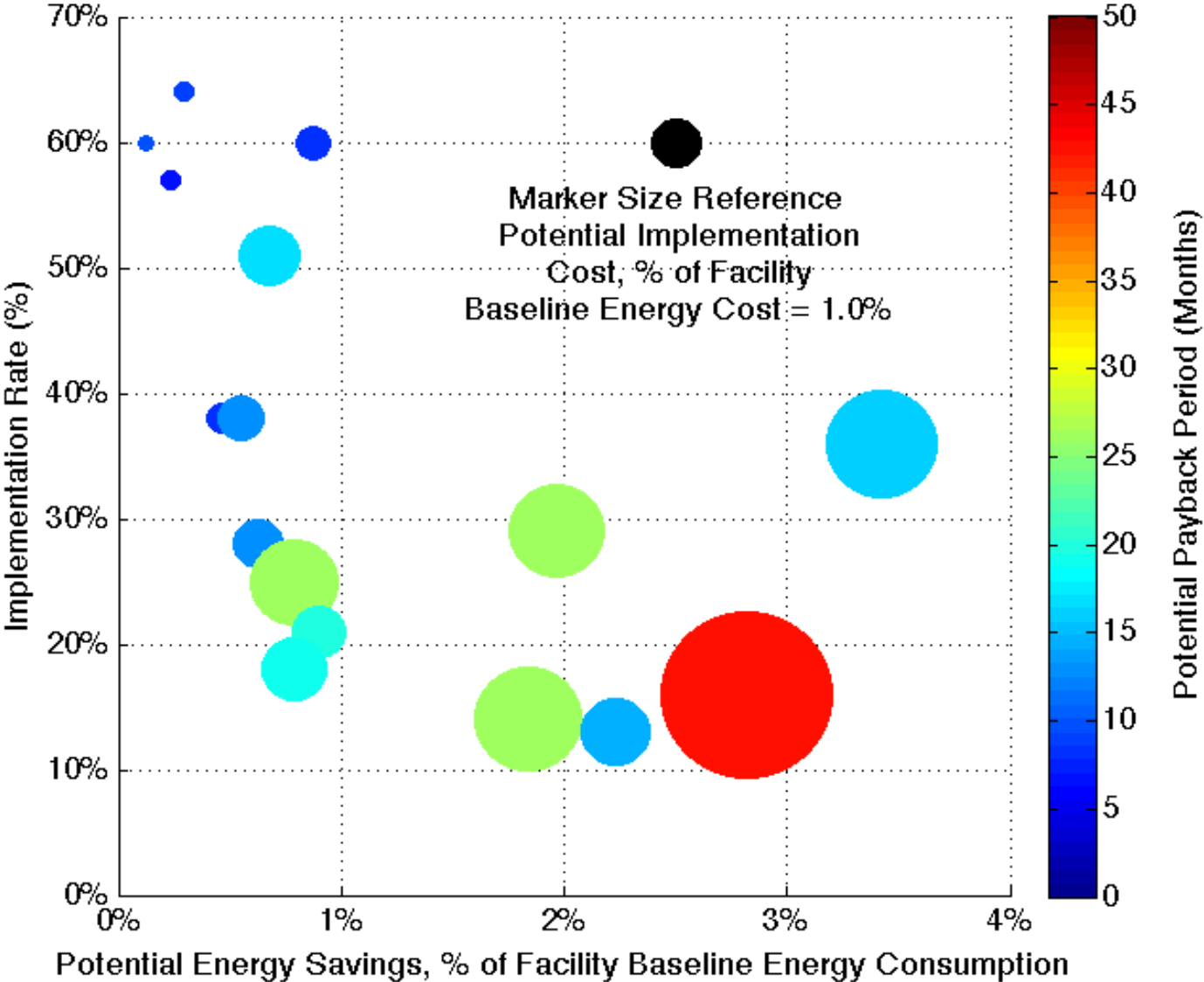
Dr. Peter Therkelsen
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UNFCCC Thematic Dialogue on Industrial Energy Efficiency
Bonn, Germany



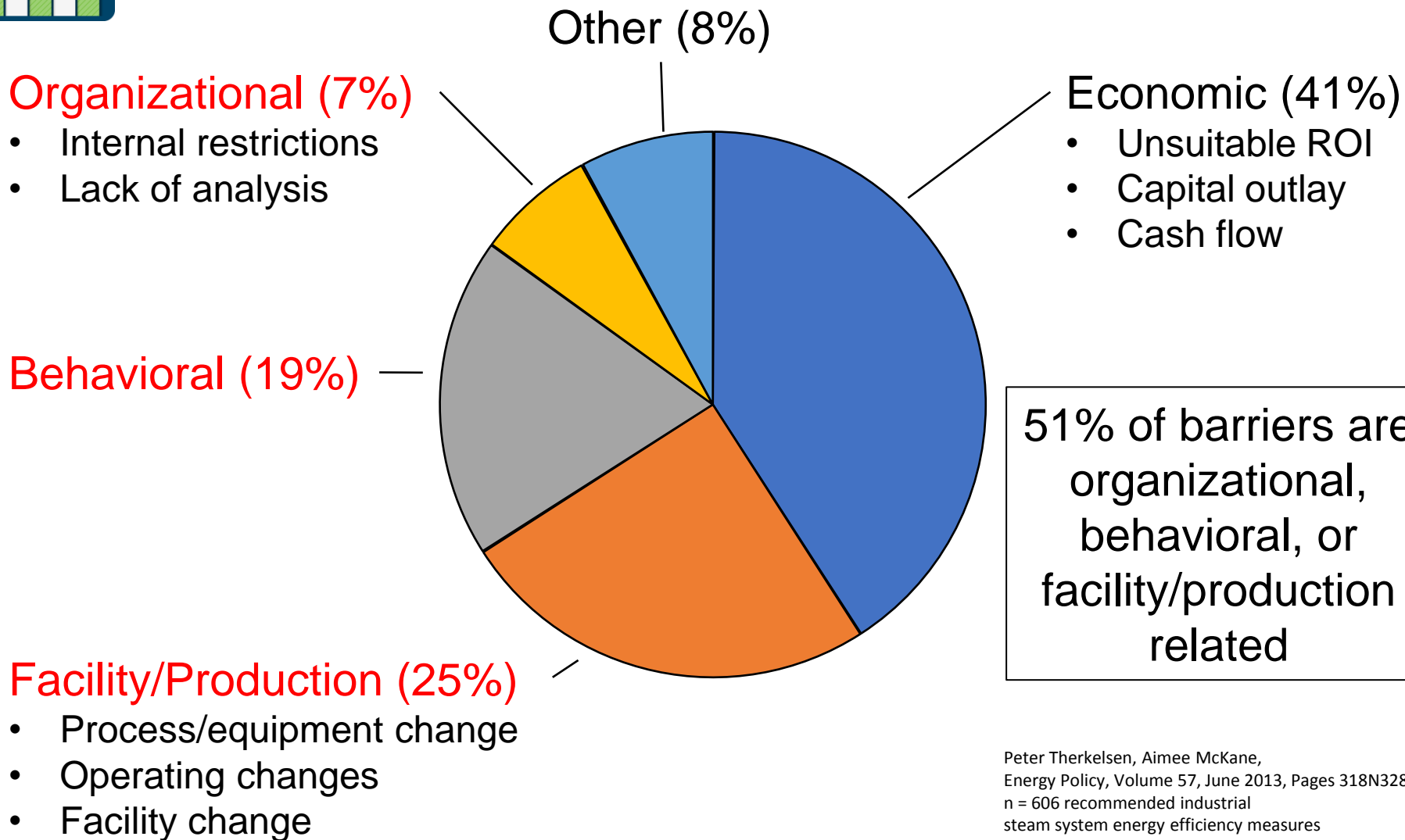
CURRENT SITUATION: IDENTIFIED INDUSTRIAL ENERGY EFFICIENCY MEASURES ARE NOT BEING IMPLEMENTED



Peter Therkelsen, Aimee McKane,
Energy Policy, Volume 57, June 2013, Pages 318N328
n = 606 recommended industrial
steam system energy efficiency measures



BARRIERS TO IMPLEMENTATION OF IDENTIFIED INDUSTRIAL ENERGY EFFICIENCY MEASURES



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ORGANIZATIONAL STRUCTURE WITHIN A INDUSTRIAL FACILITY



Top Management



Maximize Shareholder Value



Stay in Business



Energy = Sunk Cost



Energy, Environmental, Health, and Safety Managers



Meet Production Demands



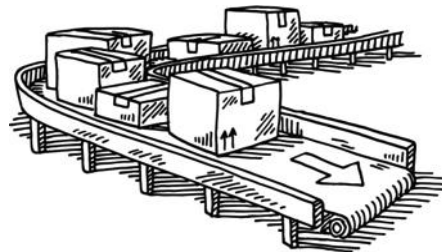
Avoid Violations



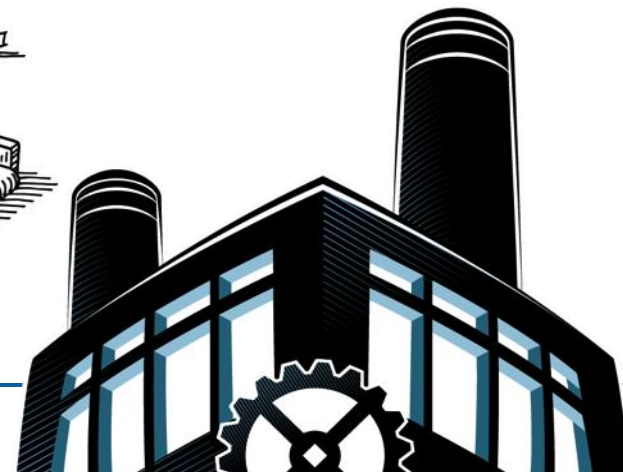
Lower Energy Prices



Production Managers and Staff



Produce Product





ISO 50001 - FRAMEWORK FOR BUSINESS PRACTICE TO MANAGE ENERGY



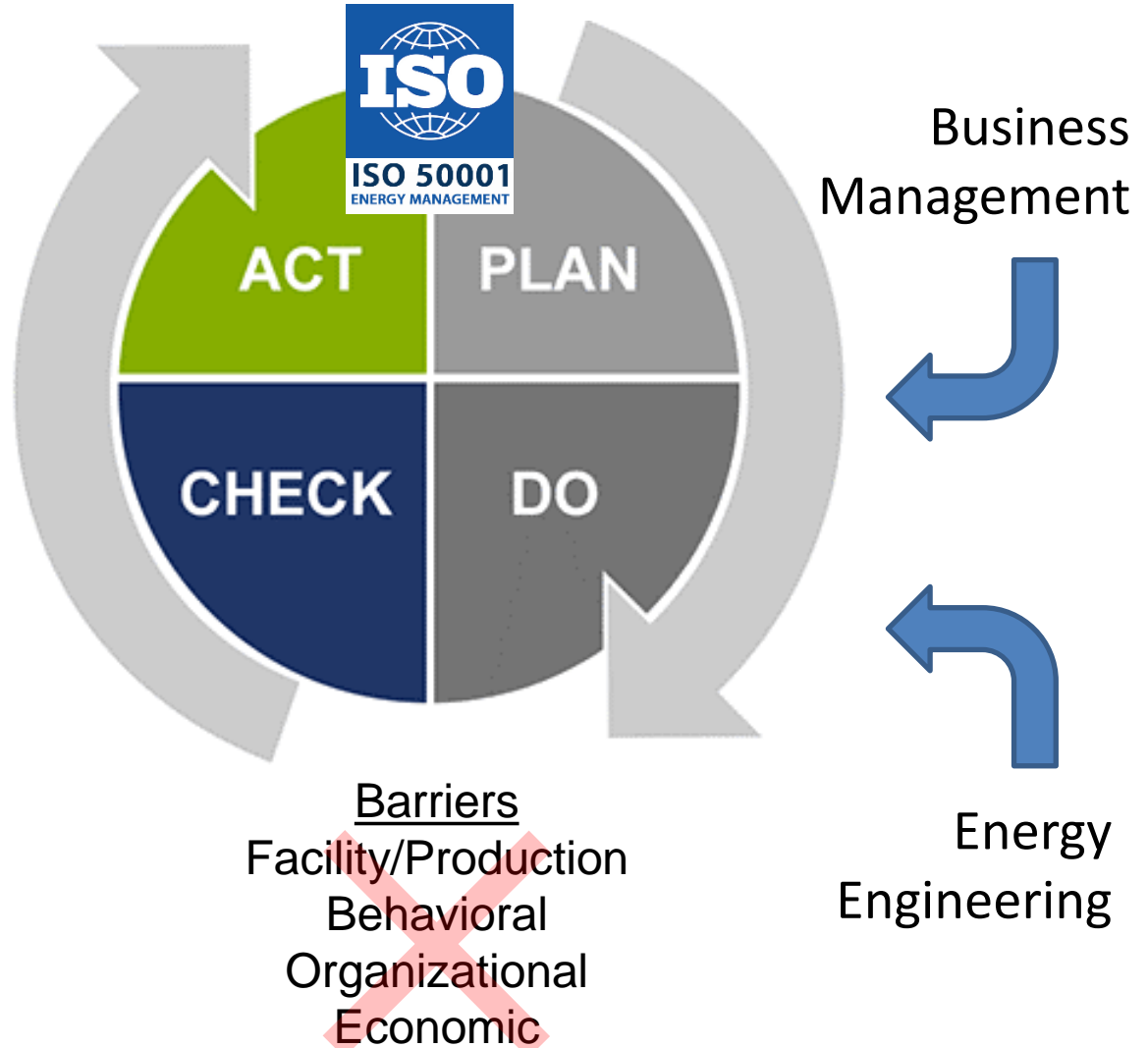
Top Management



Energy, Environmental, Health, and Safety Managers



Production Managers and Staff





LIMITATIONS IN CURRENT ISO 50001 AUDITOR QUALIFICATIONS

- The market is experiencing similar challenges with ISO 50001 auditing:
 - Some credential providers simultaneously function as the training organization, so auditors are trained to pass the exam.
 - Variable quality of auditors
 - Negative feedback from industry on audit quality:
- Market confidence in ISO 50001 and energy efficiency benefits is contingent on robust certification audits.
- Many certification auditors lack the technical & analytical skills to support these outcomes.



EPI 50001 LEAD AUDITOR – INSTITUTE FOR ENERGY MANAGEMENT PROFESSIONALS

The EPI credential...

- Increases market value of ISO 50001 by:
 - Ensuring consistent quality implementation
 - Increasing the impact of continual energy performance improvement
 - Broadening public policy recognition and acceptance
- Addresses the widespread variability in the skills and qualifications of ISO 50001 auditing personnel
- Reduces the burden on personnel certification bodies to prove the competence of their auditors
- Enables personnel certification bodies to attain ISO/IEC 17024 accreditation using a single scheme and comparable exams

No other ISO 50001 auditor credential combines the two fields of specialized expertise required for effective ISO 50001 auditing:

1. Management system auditing, e.g., ISO 9001, ISO 14001
2. Energy efficiency and performance

Most professionals have expertise in one field, but they need both.



THANK YOU!

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