

EXISTING BUILDING COMMISSIONING:

FORENSIC vs ENERGY MANAGEMENT

8TH ANNUAL CONFERENCE ON TOTAL BUILDING COMMISSIONING



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PROCESSES IN COMPARISON

Forensic Style Commissioning

Planning

Investigation

Implementation

Turnover

Persistence

Process Discussion

Motivation: usually motivated by specific systems or equipment problems.

ACG Cx Guideline:
*on Existing Building Commissioning,
“...Cx methodology is used to solve
persistent problems in existing
buildings...”*

PROCESSES IN COMPARISON

Forensic Style Commissioning

Planning

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Process Discussion

-Intent is typically narrowly focused on functionality, identifying maintenance and equipment operation deficiencies.

-Focus of discovery process is ‘inspection-based’ rather than ‘investigation-based’

-Usually funding is limited to recurring maintenance funds... limits scope

- Many times the result is only the ‘piling on’ of additional maintenance items to be performed by already overwhelmed staff

PROCESSES IN COMPARISON

Energy Management

Project Assessment

Energy Exploration

Site Investigation

Analysis

Implementation

Acceptance

Continuous Energy Management

Process Discussion

Motivation: usually motivated by desire for energy or cost reduction for either financial or sustainability interests

ACG EMP Guideline:
on Energy Management, “...applies energy management skills and knowledge to the commissioning methodology...”

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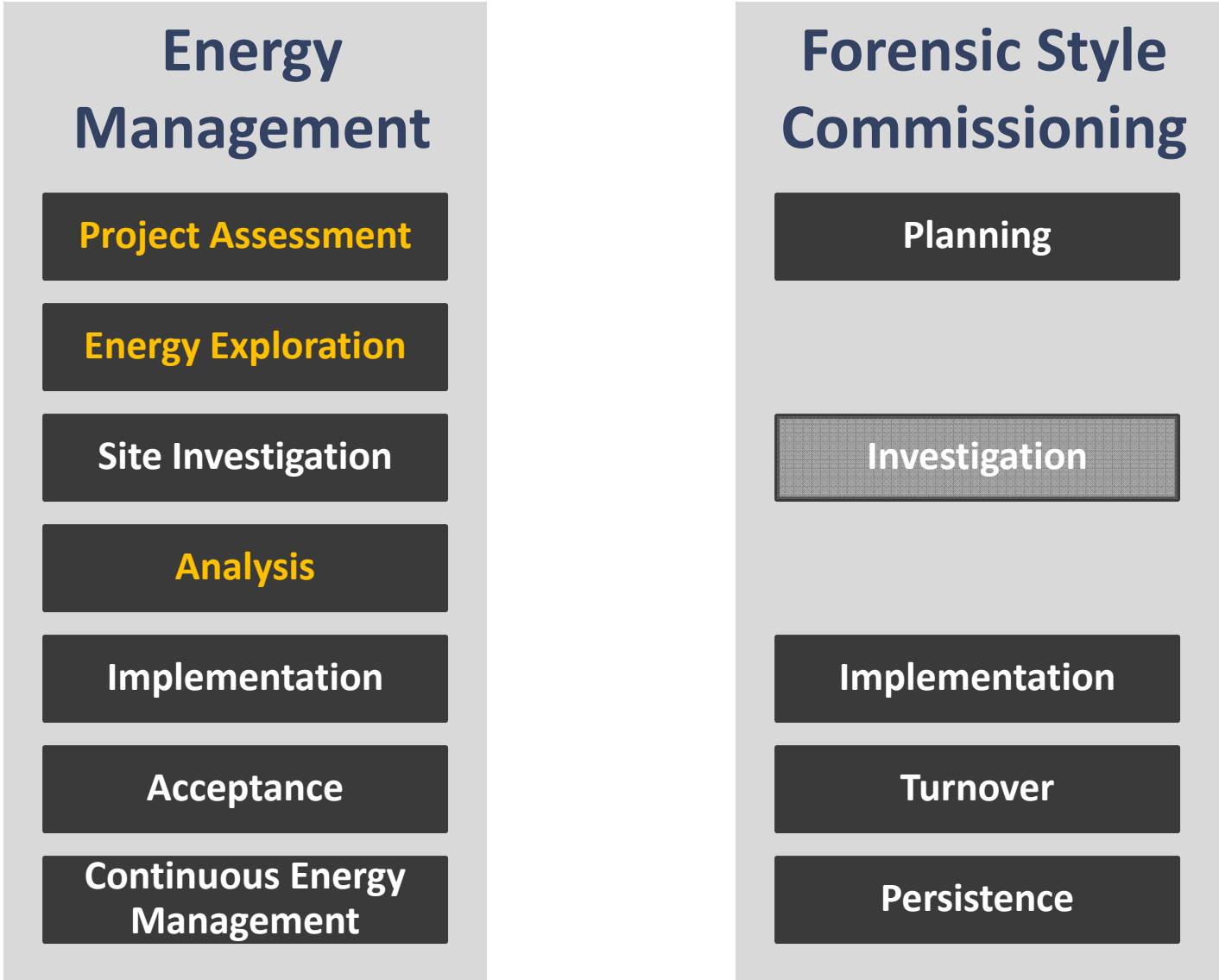
-Intent is to achieve maximum building efficiency *and* optimal building performance (functionality)

-Focus of discovery process is a true data-driven performance assessment, investigation, and analysis

-Funding can come from multiple sources: recurring maintenance, capital budget, energy incentives, infrastructure, grants

-Energy-Based Cx transforms EBCx into a *Business Plan*... facility can be viewed as a revenue generating unit

PROCESSES IN COMPARISON



CONFERENCE GROUP DISCUSSION

*Who has experience in
completing Existing Building
Commissioning Projects?*

CONFERENCE GROUP DISCUSSION

What are common obstacles or objections experienced when trying to create EBCx Projects or Energy Management Projects?

CONFERENCE GROUP DISCUSSION

Is Energy Management, or Energy-Based Cx, really a Commissioning Process or is it just an Energy Audit?

CONFERENCE GROUP DISCUSSION

*What is a 'Monitoring-Based'
Commissioning Process?*

*Is this really a Commissioning
Process or just maintenance?*

CONFERENCE GROUP DISCUSSION

How are personnel skills required to deliver Energy-Based Cx different than those required to deliver a Forensic EBCx Process?

CONFERENCE GROUP DISCUSSION

*How can a traditional Cx
Company adapt to provide
Energy-Based Commissioning
processes?*

CONFERENCE GROUP DISCUSSION

What building professional is best-suited to lead an Energy Management Project?

Design Engineer?

Commissioning Agent?

TAB Professional?

CONFERENCE GROUP DISCUSSION

What are differences in Site Investigation activities between Energy-Based Cx versus a Forensic EBCx Process?

CONFERENCE GROUP DISCUSSION

What are differences in Site Investigation activities between Energy-Based Cx versus a traditional Energy Audit?

CONFERENCE GROUP DISCUSSION

What elements are present in an Energy-Based Cx Plan that are not present for Forensic EBCx?

CONFERENCE GROUP DISCUSSION

If possible, during an EBCx investigation, should a Cx correct 'no-cost' issues as they are found?

CONFERENCE GROUP DISCUSSION

Should a Commissioning Provider manage the Implementation Phase of an Existing Building Commissioning project?

CONFERENCE GROUP DISCUSSION

***Should a Commissioning Provider
utilize construction
subcontractors to install
corrective or improvement
measures?***

(under their Contract)

CONFERENCE GROUP DISCUSSION

*Should a CxA be allowed to
assume the role of a Construction
Manager during EBCx?*

(CMs are not allowed to be CxA)

FINAL THOUGHTS

