



# Advanced Energy Retrofit (AER) Auditor Competency Map



## **Project Goal:**

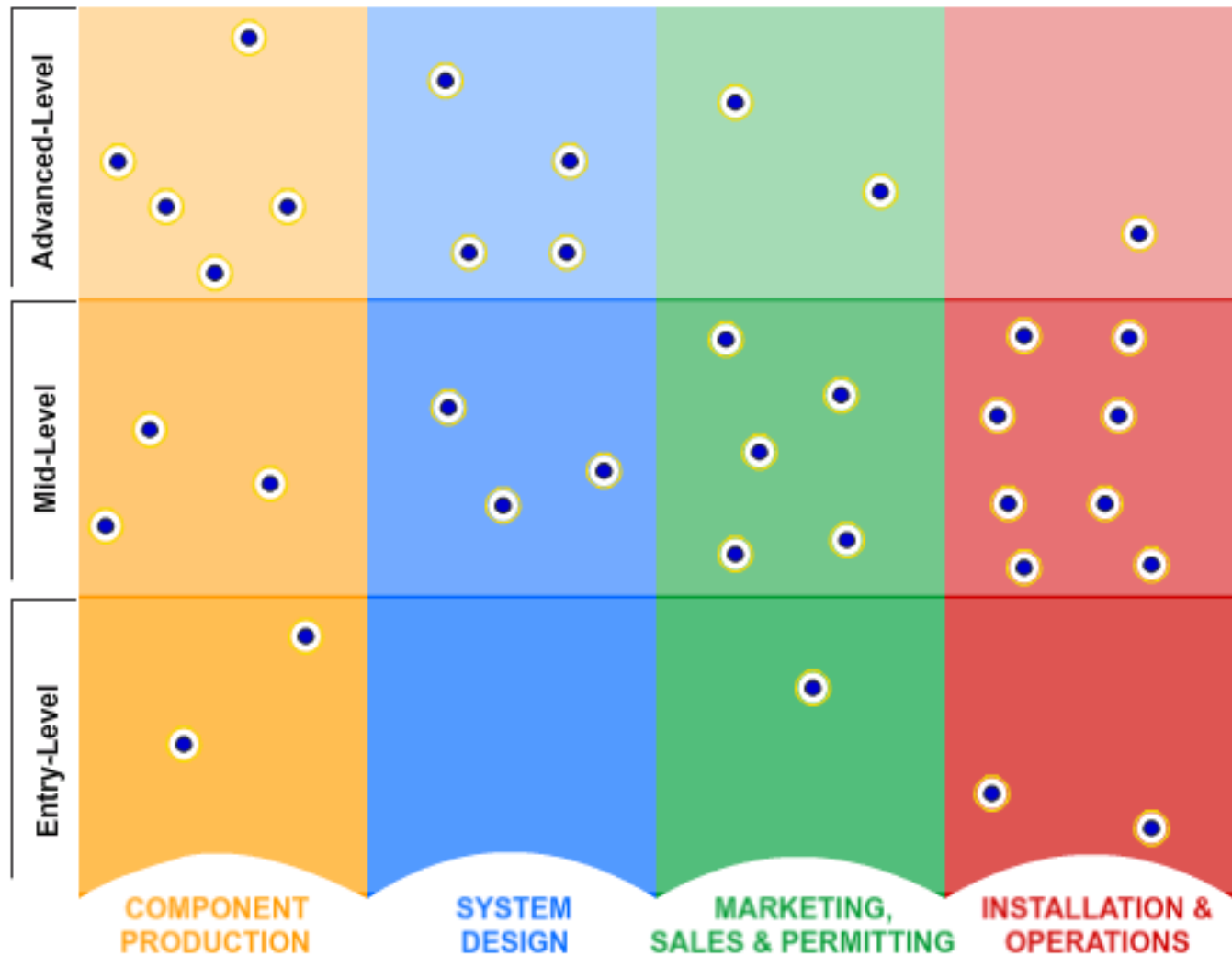
Development of an advanced energy retrofit (AER) competency map

## **Platform Goal for September 19, 2012:**

- Summarize current thinking and efforts
- Seek feedback to determine if an AER competency map makes sense

- Review and discussion of an existing competency map: SunShot Solar
- Initial concept development: AER competency map
  - Development approach
- Discussion
  - Does an AER competency map make sense?
  - What should it include?

# SunShot Solar Career Map

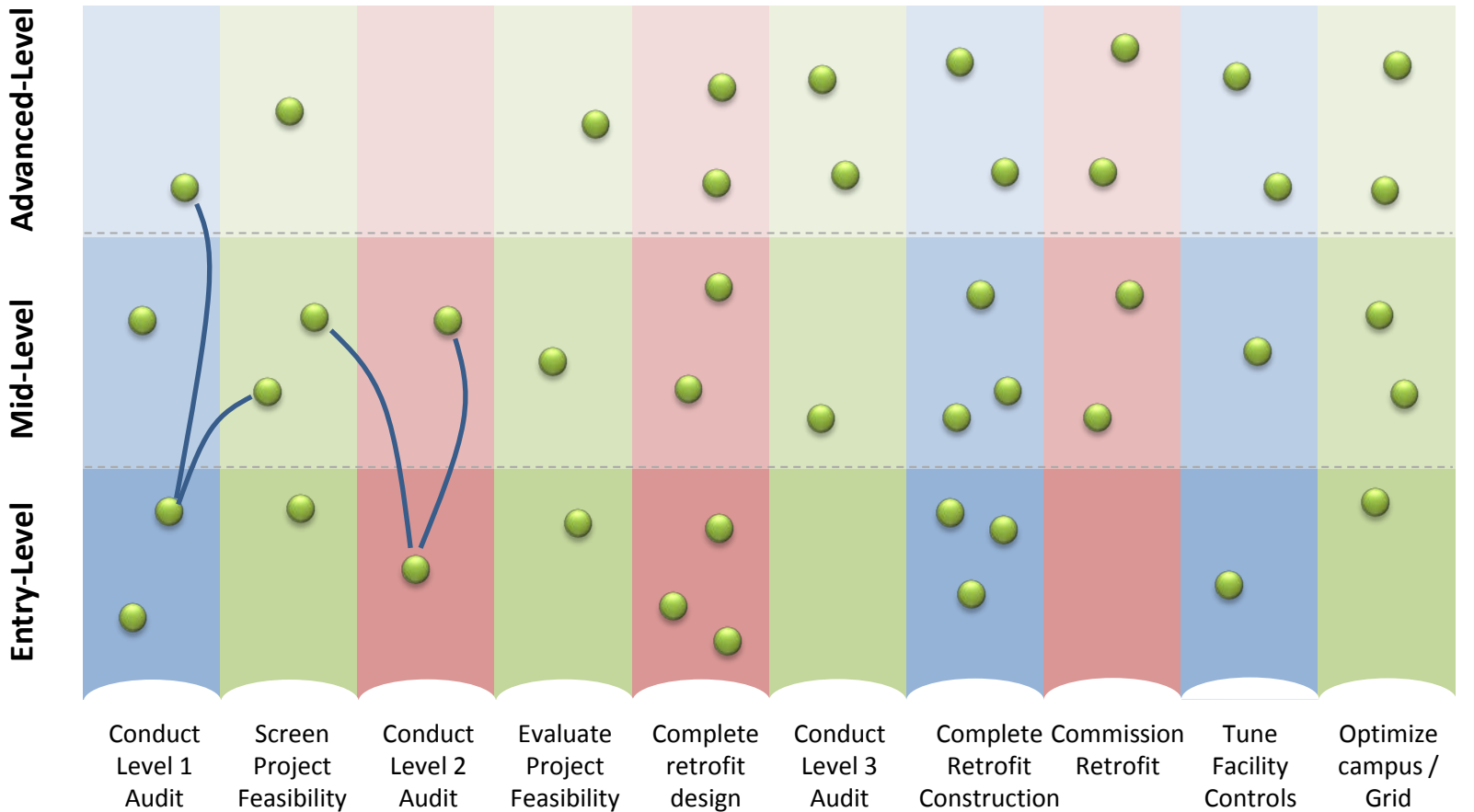


Key: Multi-Sector - - - - - Advancement ——— Job Title ●

<http://www1.eere.energy.gov/solar/careermap/>



# Initial Concept



**EEB**  
**HUB**

**FEA**

### Foundation Training and Experience Base

- Building Operator / Technician
- Engineering Economics / Finance
- Engineering Design / Analysis

## Purpose of AER Competency Map

- Identify new career directions with current job openings
  - Individuals entering the workforce for the first time
  - Incumbent workers
- Identify credential and training opportunities
- Evaluate current roles and skill sets of in-house staff
  - Building and facility managers
- Identify what courses to develop, as well as gaps in current curricula
  - Community colleges
  - 4-year degree programs

**CEB**  
**HUB**

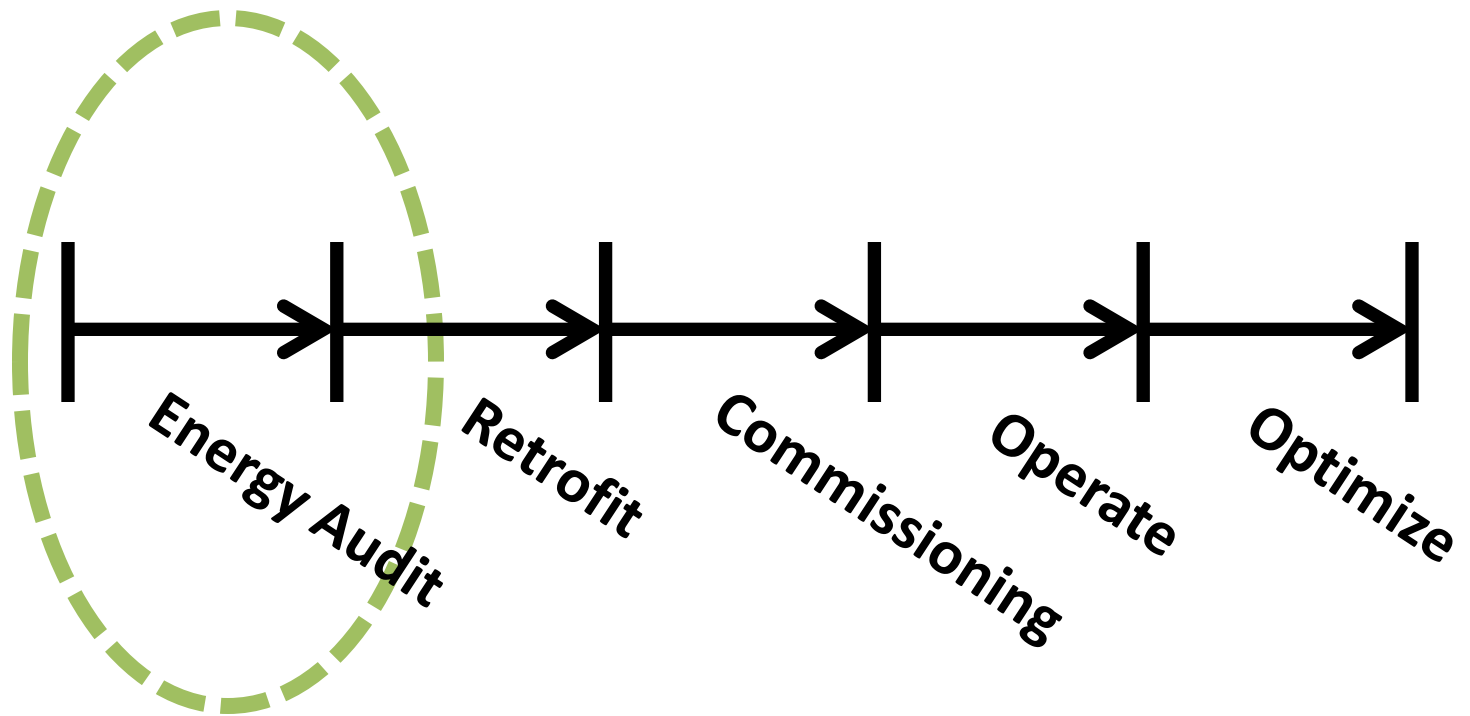
 **FEA**

# Using an Academically Rigorous Research Approach

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**HUB**

 **FEA**

# Generalization of Initial Concept



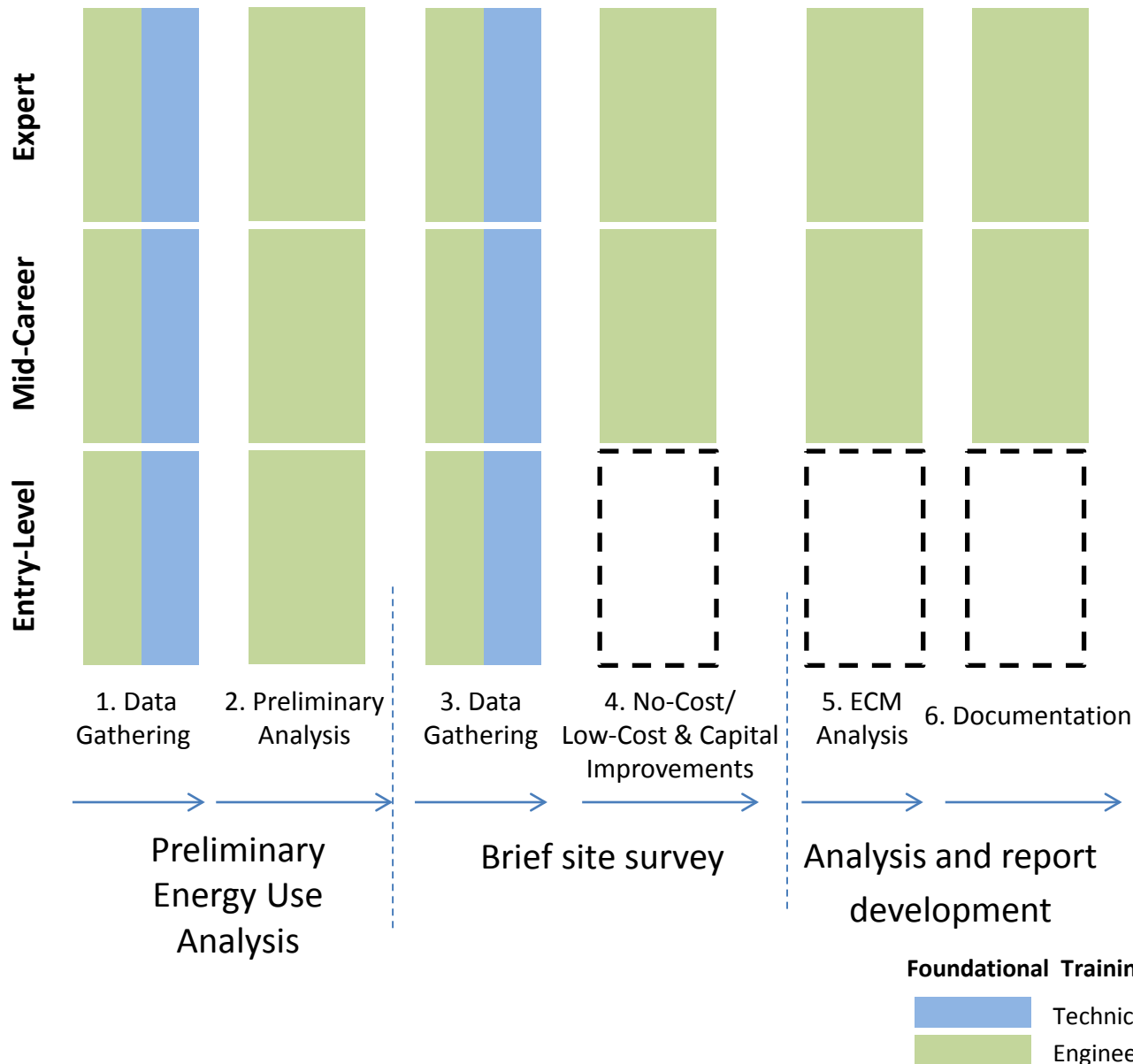


# Validation of the x-axis for the Energy Audit Process

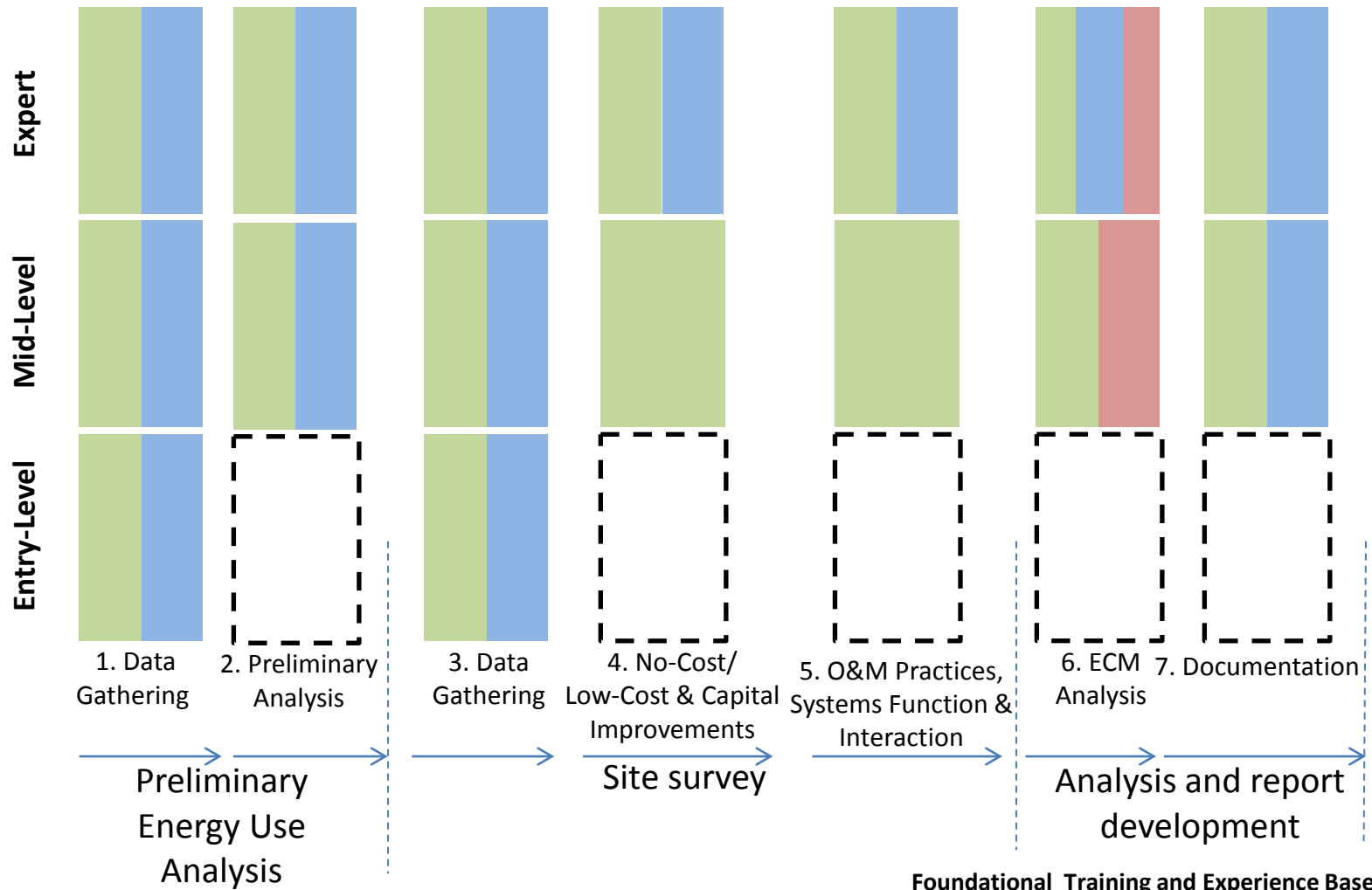
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# Level 1 Audit: Walk Through Analysis



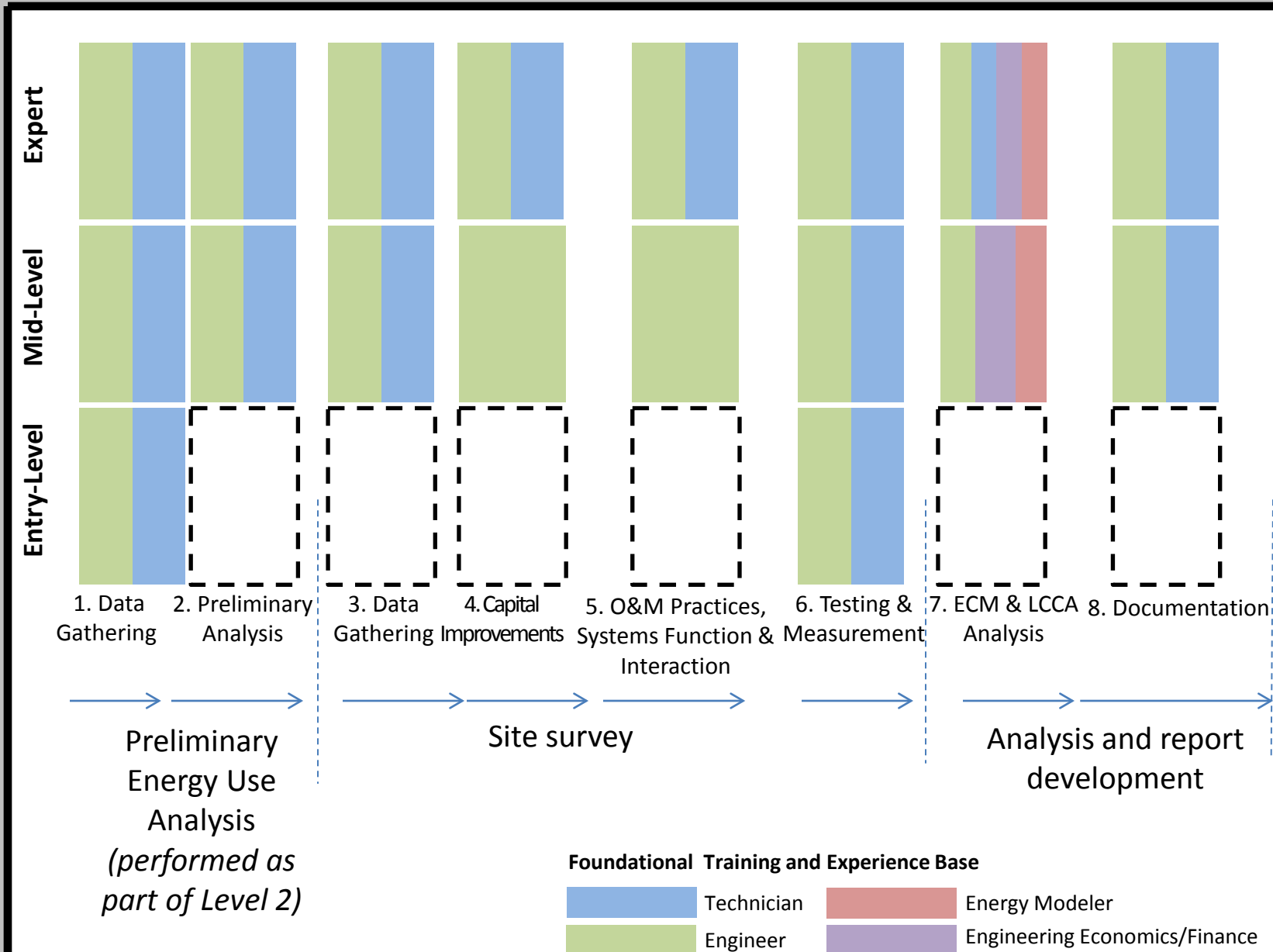
# Level 2 Audit: Energy Survey and Engineering Analysis



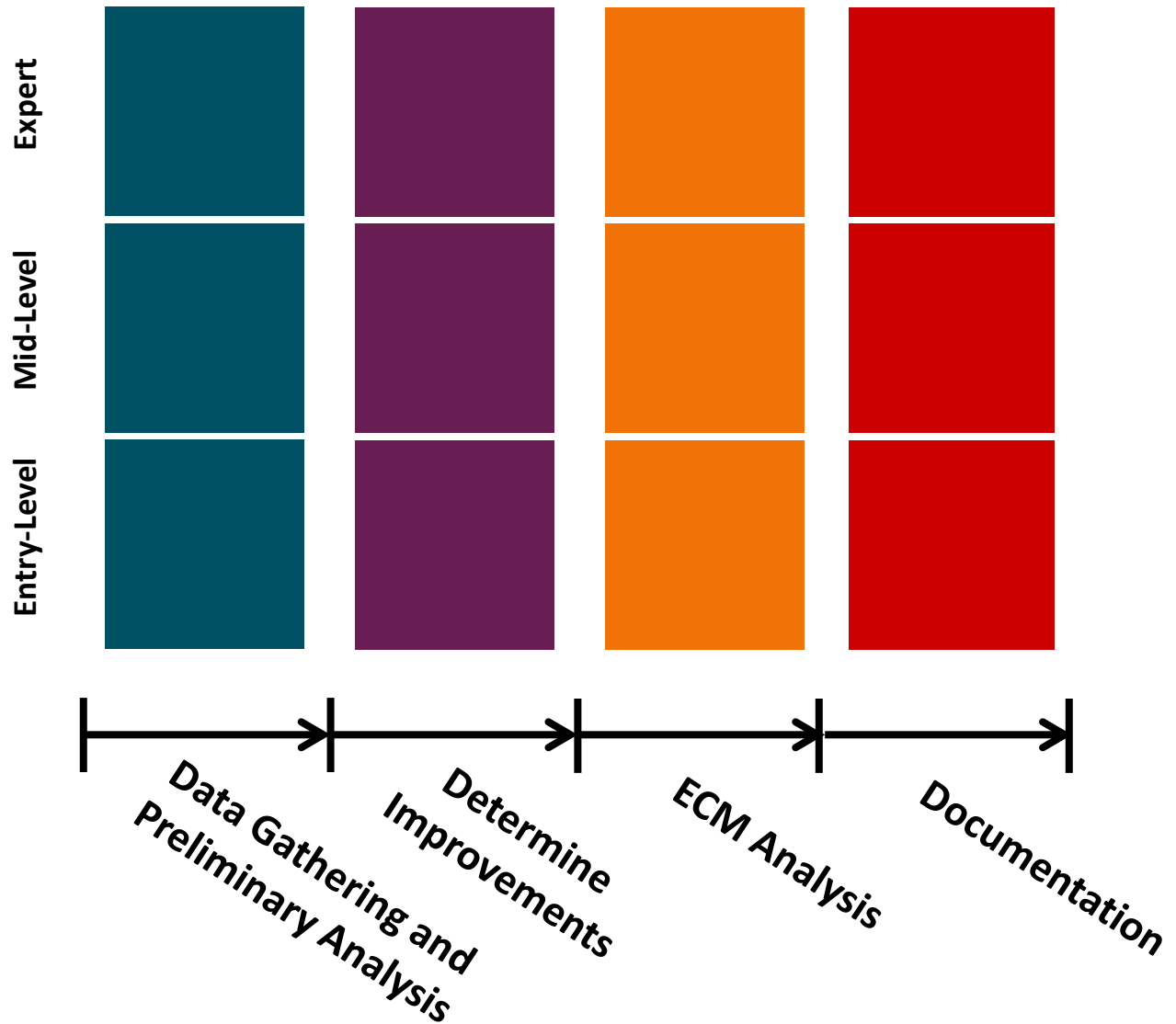
Foundational Training and Experience Base

- Technician
- Engineer
- Energy Modeler

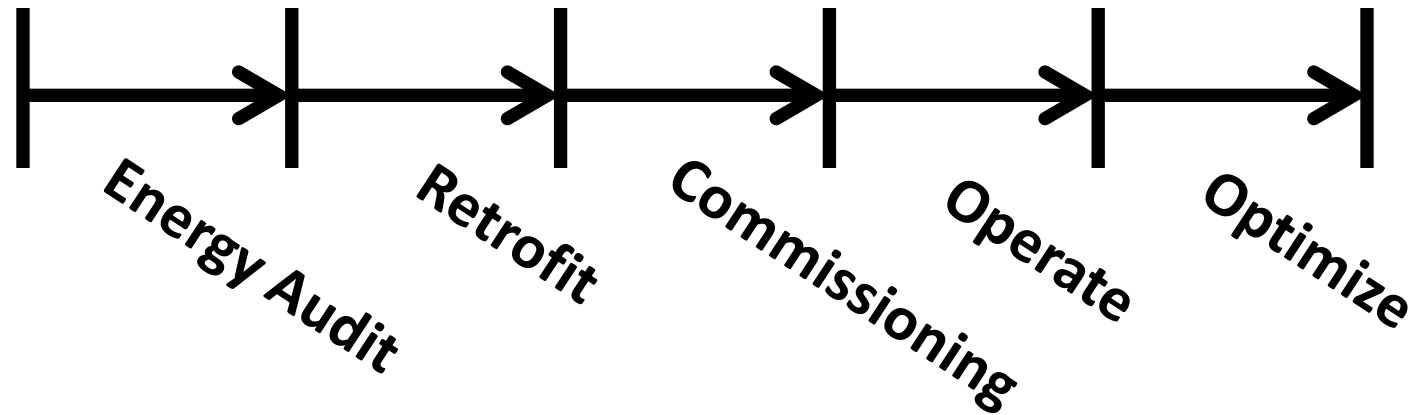
# Level 3 Audit: Detailed Analysis of Capital – Intensive Modifications



# Generalization of Energy Audit Process



# Generalization of Initial Concept



## Additional Roles

- Operating engineer/building technician
- Commissioning/ retro-commissioning authority
- Commercial building energy modeler
- Energy/sustainability manager
- Facility manager

## Discussion

- Does an advanced energy retrofit (AER) competency map make sense?
- What should be included?
- Who would find such map valuable?

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 **FEA**

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