

BEYOND

SMART CITIES

TES SYSTEMS AND CHP SYSTEMS

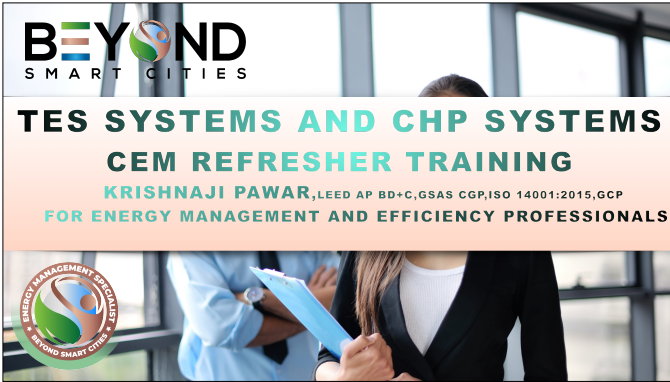
CEM REFRESHER TRAINING

KRISHNAJI PAWAR, LEED AP BD+C, GSAS CGP, ISO 14001:2015, GCP

FOR ENERGY MANAGEMENT AND EFFICIENCY PROFESSIONALS

ENERGY MANAGEMENT SPECIALIST

BEYOND SMART CITIES



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SUMMARY AND RESOURCES

FOR ENERGY PROFESSIONALS

KRISHNAJI PAWAR, LEED AP BD+C, GSAS CGP, ISO 14001:2015, GCP

ENERGY SPECIALIST CURRICULUM

ENERGY MANAGEMENT SPECIALIST

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SUMMARY



TES Terminology and Basic Designs

Storage/Peak Shaving Strategies and Storage Media Options

Calculating Approximate Savings and Storage Size

Benefits of CPH Systems

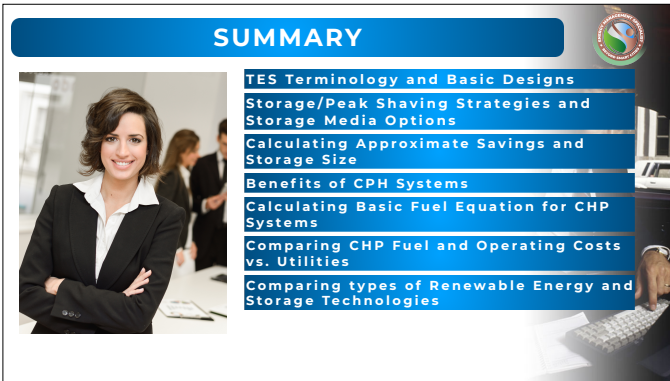
Calculating Basic Fuel Equation for CHP Systems

Comparing CHP Fuel and Operating Costs vs. Utilities

Comparing types of Renewable Energy and Storage Technologies

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KEY TAKEAWAYS

Work through practical examples to demonstrate the topics and procedures covered.

Review the various areas of the Body of Knowledge - CHP Systems ,Renewable Energy Systems and TES Systems AEE's/ BEE's certification exam perspective.

This training program helps to prepares attendees to take the Certified Energy Manager® (CEM®) exam.

One of the most globally respected certifications in the field of energy efficiency and energy management. Gain industry and peer recognition, bring value to your organization and propel your career forward.

Get CERTIFIED ENERGY MANAGER - CEM Credentials in your CV

BODY KNOWLEDGE

- ✓ Codes and Standards -----3%-5%
- ✓ Energy Accounting and Economics -----6% -10%
- ✓ Energy Audits and Instrumentation -----8%- 12%
- ✓ Electrical Power Systems and Motors -----9%-13%
- ✓ HVAC Systems-----9%- 13%
- ✓ Industrial Systems -----6% - 8%
- ✓ Building Envelope-----3% - 5%
- ✓ CHP Systems and Renewable Energy -----4%- 6%
- ✓ Fuel Supply and Pricing -----2%- 4%
- ✓ Building Automation and Control Systems -----7%- 11%
- ✓ Thermal Energy Storage Systems -----2%- 4%
- ✓ Lighting Systems -----6% - 8%
- ✓ Boiler and Steam Systems -----3% - 5%
- ✓ Maintenance and Commissioning -----8%- 12%
- ✓ Energy Savings Performance Contracting and Measurement & Verification -----3%- 5%

RESOURCES

<https://www.aeecenter.org/>

<https://knowledge.beyondsmartcities.in/>

Kowlanowski, Bernard F. Small Scale Cogeneration Handbook, The Fairmont Press, Inc. Atlanta, GA, 2000.

McKinley, Sarah, "Untapped," Energy Decisions, January-February 2000, pages 34-38.

Parks, William, et al. Reliable and Economic Natural Gas Distributed