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ENERGY SIMULATION SPECIALIST
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BUILDING ENERGY SIMULATION ANALYST - BESA OVERVIEW

ONLINE PROFESSIONAL COURSES LED BY THE WORLD'S TOP SPECIALISTS

ONLINE TRAINING BY KRISHNAJI PAWAR

LEED AP(BD+C),GSAS CGP,GCP,ISO 14001

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MODULE 8

Summary and Resources

KRISHNAJI PAWAR - CEO & FOUNDER

LEED AP(BD+C),GSAS CGP,GCP,ISO 14001

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Learning Objectives

- Introduction
- Getting Started with BEM
- Establishing the Model Scope
- Building Energy Modeling Tools
- LEED, Commissioning, & Energy Conservation
- Benefits of Building Energy Modeling
- Certification for energy modeling specialists
- Summary and Resources

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SUMMARY

- The program aims to equip participants with the knowledge, principles, and tools needed for effective energy simulation.
- Energy models are crucial in achieving energy-efficient designs, assessing the effectiveness of various components like climate, geometry, material properties, and lighting.
- Architects play a crucial role in energy modeling, optimizing building design, systems, and operations to minimize environmental impact and maximize energy efficiency.
- Beyond Smart Cities specializes in energy modeling for various building types and climate zones.

BESA OVERVIEW TRAINING PROGRAM +

- Energy simulation has been used by mechanical engineers to scale building cooling and heating equipment.
- The training focuses on building energy simulation tools, advantages of building energy simulation, and professional certification.
- The program also includes a BESA exam sample question.
- The BESA professional certification by AEE identifies individuals with exceptional knowledge and practical skills in evaluating a facility's energy efficiency using building energy simulation software

SUMMARY AND THOUGHTS ON THE FUTURE

- At this time, these determinations regarding the most energy-efficient design strategy require the use of a BEM.
- Energy efficiency does not have a simple solution or silver bullet; rather, it necessitates a comprehensive, integrated, and building-wide design methodology.
- Advancements in energy-efficient building design have been substantial; however, the realization of environmentally conscious architecture that appreciates the natural environment remains a distant goal.
- It begins with gaining a comprehension of the building type and climate in which it will be constructed.

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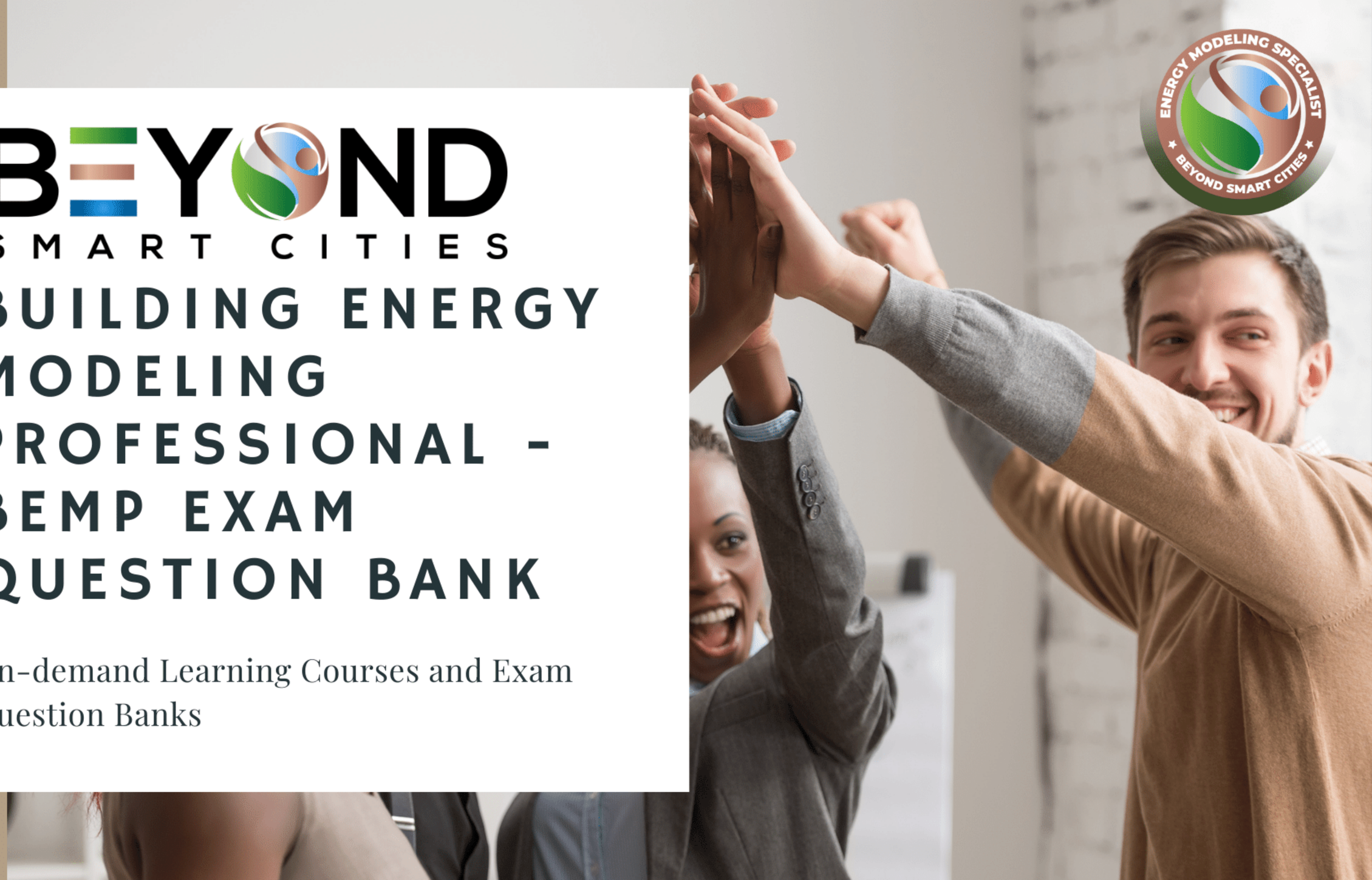
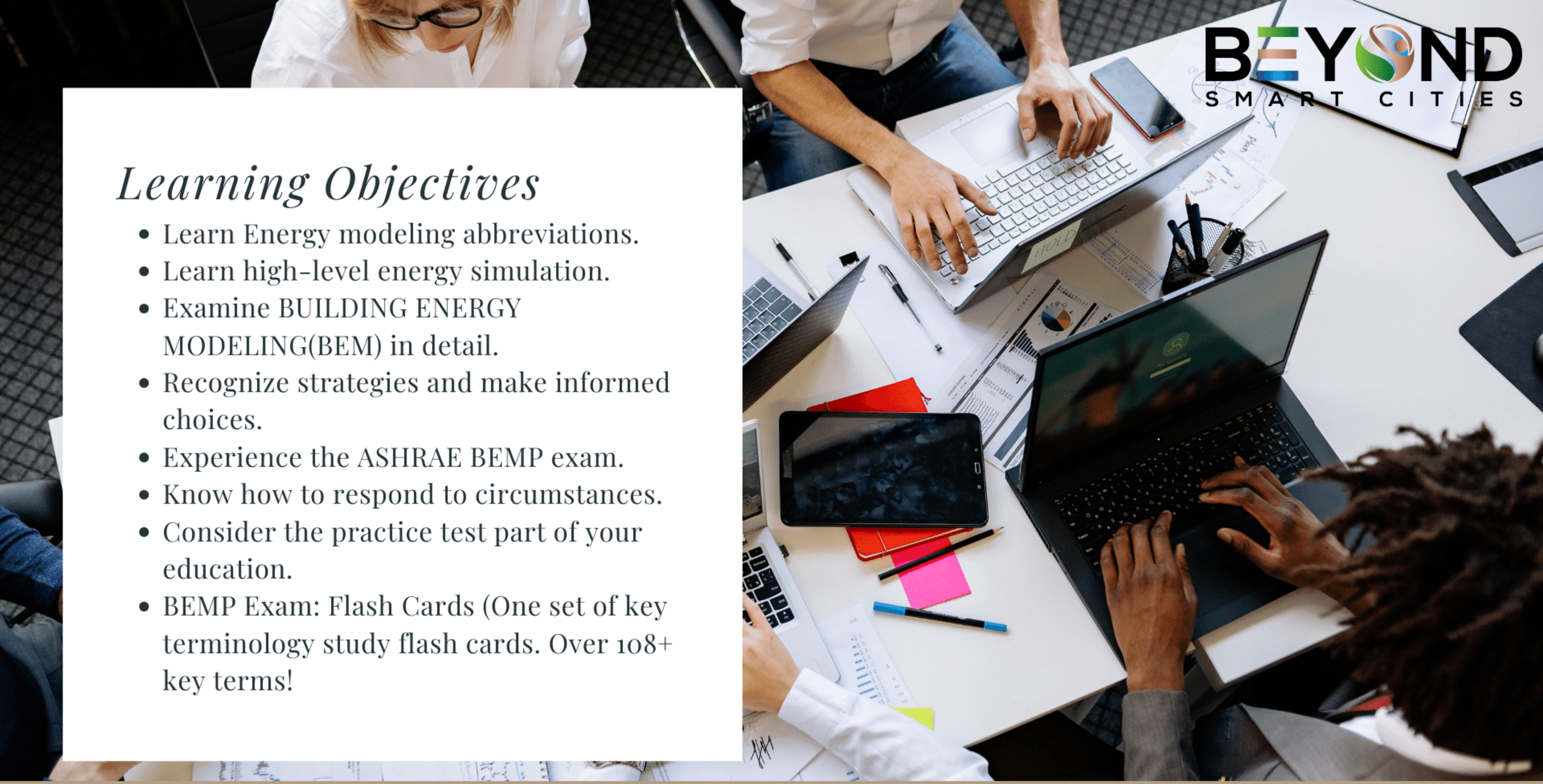
BUILDING ENERGY MODELING PROFESSIONAL - BEMP EXAM QUESTION BANK

On-demand Learning Courses and Exam Question Banks





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Learning Objectives

- Learn Energy modeling abbreviations.
- Learn high-level energy simulation.
- Examine BUILDING ENERGY MODELING(BEM) in detail.
- Recognize strategies and make informed choices.
- Experience the ASHRAE BEMP exam.
- Know how to respond to circumstances.
- Consider the practice test part of your education.
- BEMP Exam: Flash Cards (One set of key terminology study flash cards. Over 108+ key terms!

Who can benefit?

- Building energy modeling and simulation professionals who want to earn Building Energy Modeling Professional (BEMP) credentials
- Building professionals who want to learn more about energy modeling terminologies and processes
- Individuals seeking a better understanding of HVAC, energy management, and building energy modeling
- For those who are starting their journey in the energy modeling profession.
- Architects, energy engineers, MEP professionals, energy engineers, and building designers

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Benefits of our simulation exams

- Check your knowledge before the Building Energy Modeling Professional - BEMP Exam.
- 500+ questions in 5 simulated exams cover BEMP Exam Study Material.
- Learn the reasoning behind each question and answer and the related knowledge to review.
- The exam should be passed on the first try.
- Study Flashcards for the ASHRAE BEMP Exam

WELCOME TO BEYOND SMART CITIES

Beyond Smart Cities is the world's 1st Green Technology Marketplace, connecting millions of Sustainability Specialists, Green Building Specialists, Energy Specialists, Commissioning Specialists, Environment Specialists, Health & Safety Specialists, Fire Safety Specialists, Climate Change Specialists & Green Products/Technology Manufacturers with independent talent around the globe.

Our mission is to build and support a global community of experts with the highest professional standards in sustainability, green building, energy, commissioning, environment, health & safety, fire safety, climate change, GHG accounting, carbon auditing, and GHG emissions management.

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BRIEF ABOUT ME

Krishnaji PAWAR

CEO & FOUNDER

Krishnaji Pawar is founder and CEO of Beyond Smart Cities. Before being named CEO in January 2020, Krishnaji held leadership roles at Beyond Smart Cities in both Sustainability ,Energy & Environmental Consultancy.

Specialized in developing sustainable design strategies for Green Building Certification Systems (LEED, GSAS, etc.), Energy & Water Conservation, Commissioning, Environmental Impact Assessment & Environmental Management Systems.

Currently responsible for 3,787 million square feet Green Building /Energy modeling Consulting since January 2008 in UAE, India and Qatar.

RESOURCES

- Torben Østergård, Rasmus L. Jensen, and Steffen E. Maagaard, “Building Simulations Supporting Decision Making in Early Design: A Review,” Renewable and Sustainable Energy Reviews 61 (2016): 187–201. doi:10.1016/j.rser.2016.03.0456 Thomas Reeves, Svetlana Olbina, and Raja R.A. Issa, “Guidelines for Using Building Information Modeling for Energy Analysis of Buildings” Buildings 5, no. 4 (2015): 1361–1388.
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- Timothy Hemsath, “Conceptual Energy Modeling for Architecture, Planning and Design: Impact of Using Building Performance Simulation,” in 13th Conference of International Building Performance Simulation Association, ed. Etienne Wurtz (Chambéry, France: IBPSA, 2013), 376–384.
- Energy Modeling in Architectural Design,Timothy L. Hemsath and Kaveh Alagheh Bandhosseini
- ASHRAE Website

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