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welcome to
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PEARL QUALIFIED PROFESSIONAL
PQP OVERVIEW
ONLINE TRAINING BY KRISHNAJI PAWAR
LEED AP(BD+C),GSAS CGP,GCP,ISO 14001
KNOWLEDGE IS POWER
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MODULE 1

Introduction and Course Outline

KRISHNAJI PAWAR - CEO & FOUNDER

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

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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.



PEARL QUALIFIED PROFESSIONAL OVERVIEW

Beyond Smart Cities provides a comprehensive Pearl Qualified Professional —PQP package, simplifying the process of becoming a certified professional, covering exam preparation, sustainable design, and certification advantages.

Learning Objectives

- Introduction
- How green buildings fight climate change
- Sustainable Development and Green Buildings
- Organizational Fundamentals
- How green buildings fight climate change
- Advantages of and PQP & Pearl Rating System
- Getting a PQP Credential
- Summary and Resources
- PQP Quiz_Test Your Knowledge!

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INTRODUCTION

- Simplifies the journey to becoming a Pearl Qualified Professional—PQP.
- Provides comprehensive exam preparation for the PQP Professional Exam.
- Includes understanding of the Pearl Rating System (PRS) Green Credentialing Process, Basic Concepts of Sustainable Design, organizational fundamentals, and Advantages of PRS Green Certification.
- Includes a comprehensive study roadmap for exam preparation.
- Allows for effective tailoring of study habits to personal needs.

GREEN BUILDING REVOLUTION

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- The U.S. Green Building Council (USGBC) was founded in 1993 to promote green building.
- The LEED Green Building Rating System was launched in 2000 to measure green buildings.
- Green buildings reduce carbon emissions by about 40% compared to conventional buildings.
- The Green Building Rating System challenges all sectors to learn more about limiting emissions from new buildings.
- The movement emphasizes on design for higher performance, not just design for the sake of design.
- The goal is to create a planet powered by renewable energy, populated by sustainable communities housed in green buildings, driven by clean, green innovation.



THE GREEN BUILDING REVOLUTION: A HISTORICAL OVERVIEW

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- Montreal Protocol in the 1980s limited chlorinated fluorocarbons' harmful effects on the ozone layer.
- Brundtland Commission defined sustainability in 1987, emphasizing present generations' needs without compromising future generations.
- U.S. Green Building Council (USGBC) formed in 1993, influenced by Earth Day and U.N. Conference on Environment and Development.

THE GREEN BUILDING REVOLUTION: A HISTORICAL OVERVIEW +

- Kyoto Protocol established in the late 1990s, regulating global greenhouse gas emissions.
- LEED Green Building Rating System introduced by USGBC in 2000.
- Green building revolution aims for responsible occupants, community infrastructure, natural resources, and global environment.
- The Pearl Building Rating System (PBRS) aims to promote sustainable building development and enhance quality of life by integrating Estidama's four pillars, promoting local material use, and improving sustainable supply chains.



GREEN BUILDING MARKET OVERVIEW

- Arab engineering Bureau reports growing acceptance of green buildings due to climate change information.
- Green buildings offer immediate operational, marketing, and design savings, and long-term energy security.
- Market includes commercial, institutional, residential, public, educational, nonprofit, and corporate owners.
- Middle East's construction industry is transitioning towards sustainable design to decarbonize economies.
- Gulf states' high per capita CO2 emissions and vulnerability to climate change prompt regional leaders like Saudi Arabia and UAE to pledge carbon neutrality.
- Greening construction industry and transition to renewable energy are key to achieving regional environmental goals.



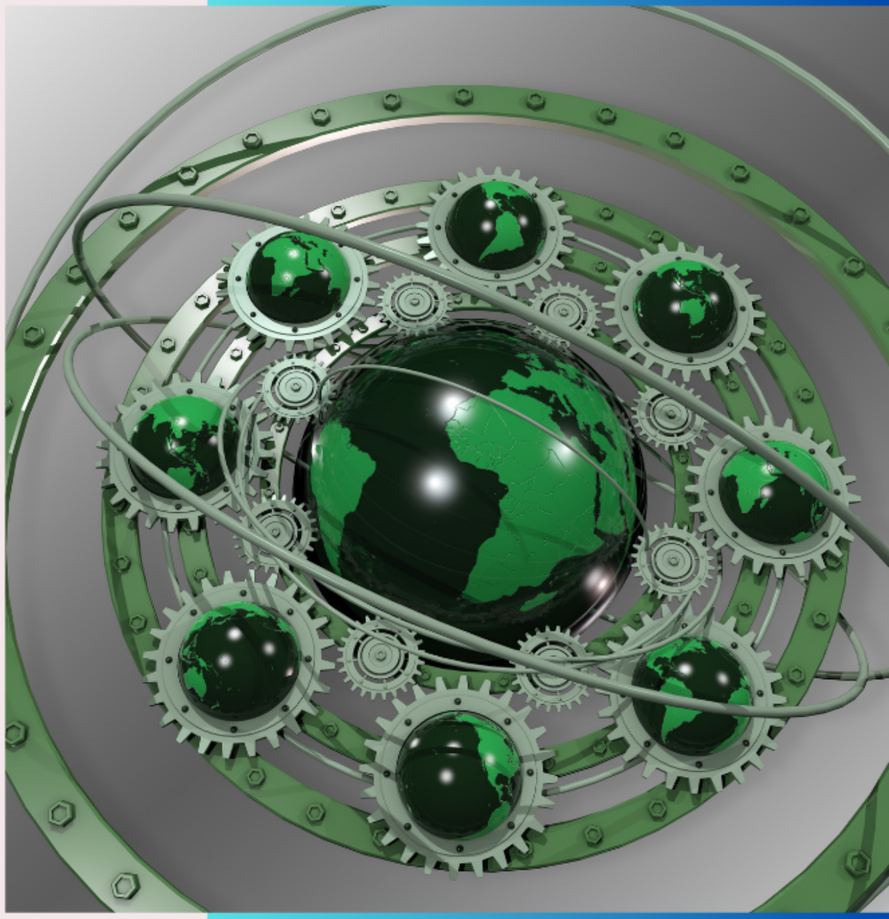
MIDDLE EAST BUILDING INDUSTRY'S ECO-FRIENDLY APPROACH

- Emphasizes eco-friendly architecture, traditional methods, and sustainable construction.
- Green building design is a top priority.
- Dubai's 3D printing strategy aims for 25% of local buildings to be 3D printed by 2030.
- Saudi Arabia aims to build 1.5 million houses using 3D printing and fast-brick robotics by 2030.
- Over 40 precast building factories established.



WHAT IS A GREEN BUILDING?

A green building is a high-performance property designed to reduce its environmental impact and human health through better siting, design, material selection, construction, operation, maintenance, removal, and reuse. However, a building cannot be considered a green building if it is not rated and certified by an independent third party. Building owners and designers should consider the standards they are measuring their design against.



GREEN BUILDING DEFINITION AND CERTIFICATION

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- A green building is a high-performance property designed to reduce environmental and health impacts.
- It uses less energy and water, and minimizes the life-cycle environmental impacts of materials.
- Green buildings are rated and certified by an independent third party, ensuring an open process for rating system creation and maintenance.
- Building owners and designers should follow IGBC GREEN but apply for certification of the final building.
- "Sustainable design" should be measured against specific standards and proven.



IMPACT OF BUILDINGS ON ENVIRONMENT

- Buildings contribute to 12% of freshwater use, 30% of raw materials, 30% of greenhouse gas emissions, 45-65% of landfill waste, 31% of solid waste, and 7% of electricity consumption.
- Green buildings offer 30% energy, 30-50% water, 35% reduction in carbon emissions, and 50% reduction in construction waste.
- Governments and universities often design green buildings with a long-term perspective.
- Integrated design is used for high-performing green buildings on conventional budgets.





ESTIDAMA: A SUSTAINABLE DEVELOPMENT INITIATIVE IN ABU DHABI



- Estidama, an Arabic term for sustainability, is an initiative developed by the Abu Dhabi Urban Planning Council (UPC) to achieve Sheikh Zayed bin Sultan Al Nahyan's dream.
- The ultimate goal is to preserve and enrich Abu Dhabi's physical and cultural identity while improving its quality of life.
- The Pearl Rating System (PRS) is a framework for sustainable design, construction, and operation of communities, buildings, and villas.
- The PRS is tailored to the hot climate and arid environment of Abu Dhabi, supporting Abu Dhabi's social and cultural traditions and values.
- The PRS requires accountability of the operational phase of a development to verify performance.
- Two different computerized multiple choice exams are available for Estidama testing.

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VALIDATE YOUR SUSTAINABILITY KNOWLEDGE.



- Validates sustainability knowledge: Green jobs demand certification.
- Enhances green building knowledge: Exam provides fundamental understanding of transportation, energy, water, and air quality.
- Joins the global network: Earning an PQP credential connects you with a national and international community of sustainability professionals.

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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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THANK YOU

