



# IM026:

## **Capital Planning & Asset Management in Utility Sectors**



















## **Training Description:**

This comprehensive training course provides utility professionals with the essential tools, frameworks, and practices needed to plan, finance, and manage capital-intensive infrastructure assets. It focuses on linking strategic planning with operational execution and explores data-driven asset management to extend the life, performance, and value of utility infrastructure assets.

## **Training Objectives:**

#### By the end of the training, participants will be able to:

- ✓ Understand the lifecycle of capital planning and asset management
- ✓ Develop strategic capital investment plans aligned with regulatory, financial, and service objectives
- ✓ Apply industry-standard asset management frameworks (ISO 55000, PAS 55, etc.)
- ✓ Implement condition assessment, risk prioritization, and renewal planning techniques
- ✓ Evaluate financial modeling and funding strategies for capital projects
- ✓ Incorporate digital tools like GIS, CMMS, and APM systems in asset tracking and planning

## Training Designed for:

This training course is intended for the following professionals, Asset Managers, Capital Planning Engineers, Utility Managers (Water, Power, Gas), Investment & Finance Analysts in Utilities, Regulatory Affairs Managers, Maintenance Engineers, Public Infrastructure Planners and Project Managers involved in infrastructure and capital planning.

## **Training Requirement:**

"Hand's on practical sessions, equipment and software will be applied during the course if required and as per the client's request."

Contents can be adapted to your specific wishes. It is therefore possible to focus on specific modules of the training course as per client's learning needs and objectives. Further, it should be forwarded to us a month prior to the course dates.

## **Training Program:**

#### DAY ONE:

- Foundations of Capital Planning in Utilities
  - Overview of Utility Infrastructure: Assets, Lifecycles & Capital Needs
  - Strategic Capital Planning vs. Tactical Planning
  - Regulatory and Financial Drivers for Capital Investments
  - Governance, Accountability & Stakeholder Alignment
  - Long-Term Capital Planning (LTCP) Approaches
  - Case Study: 20-Year Capital Investment Plan for a Water Utility

#### DAY TWO:

- Introduction to Asset Management Frameworks
  - Principles of Asset Management (ISO 55000, PAS 55)
  - Setting Asset Management Objectives & KPIs
  - Asset Hierarchies, Registers & Criticality Analysis



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- Role of Technology in Asset Management (GIS, CMMS, APM)
- Risk-Based Asset Management: Failure Modes and Risk Matrices
- Exercise: Developing an Asset Management Policy & Strategy

#### **DAY THREE:**

- Data-Driven Decision Making & Lifecycle Costing
  - Condition Assessment Techniques (Visual, NDT, Remote Sensing)
  - Lifecycle Cost Analysis (LCCA) and Total Cost of Ownership (TCO)
  - Predictive Modeling and Remaining Useful Life (RUL) Estimation
  - Capital Project Prioritization Models & Multi-Criteria Analysis
  - Role of Digital Twins and AI in Asset Intelligence
  - Group Activity: Rank Projects Based on Risk-Cost Matrix

#### **DAY FOUR:**

- Capital Financing & Budgeting in Utilities
  - Sources of Capital: Tariff Revenues, Bonds, PPPs, Donor Funds
  - Developing Multi-Year Capital Budgets
  - Cost-Benefit Analysis and Net Present Value (NPV) in Capital Planning
  - Asset Renewal vs. New Build: Financial Trade-offs
  - Integrating Asset Management with Financial Forecasting
  - Workshop: Building a Sample Capital Funding Strategy

#### DAY FIVE:

- Implementation, Performance Monitoring & Continuous Improvement
  - Implementation Planning & Change Management in Utilities
  - Linking Asset Management Plans with O&M Programs
  - Setting up KPIs for Capital and Asset Performance
  - Governance Models for Capital Delivery
  - Continuous Improvement Loops (Plan-Do-Check-Act)
  - Final Exercise: Develop a Utility Capital & Asset Management Action Plan
- Course Conclusion
- ❖ POST-ASSESSMENT and EVALUATION

## Training Methodology:

This interactive training course includes the following training methodologies as a percentage of the total tuition hours:

- 30% Lectures, Concepts, Role Play
- 70% Workshops & Work Presentations, Techniques, Based on Case Studies & Practical Exercises, Gamification, Software & General Discussions
- Pre and Post Test

## Training Certificate(s):

CMCT Internationally recognized certificate(s) will be issued to each participant who completed the course.

## **Training Fees:**

**TBA as per the course location -** This rate includes participant's manual, hand-outs, buffet lunch, coffee/tea on arrival, morning & afternoon of each day.



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Note: The 5% VAT (Value Added Tax), will be effective starting 01<sup>st</sup> of January 2018 as per the new regulation from the UAE Government. The VAT applies for all quotation both for local and abroad.

#### **Group and Corporate Discounts:**

• We offer group and corporate discounts on many courses. These discounts are available for clients who want to maximize their return on investment.

#### **Individual Discounts:**

• We offer individual discounts on many courses for people who are self-sponsored and make their payment in full and upfront at the time of registration

## **Training Timings:**

#### **Daily Timings:**

07:45 - 08:00	Morning Coffee / Tea
08:00 - 10:00	First Session
10:00 - 10:20	Recess (Coffee/Tea/Snacks)
10:20 - 12:20	Second Session
12:20 - 13:00	Recess (Prayer Break & Lunch)
13:00 - 14:00	Last Session

### For training registrations or in-house enquiries, please contact:

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