

# Better Energy Management with Transition Engineering

## INTRODUCTION

- This Better Energy Management with Transition Engineering training seminar will equip delegates to make existing energy and environmental management systems more useful to support strategic business changes towards sustainability. It will provide tools to help understand the system dynamics of their organisations, to provide better support for strategic decision making and to implement change with more confidence in successful outcomes. It will enable delegates to think differently about the challenges of “unsustainability”, to identify and respond to risks, and contribute to change programme to ensure long term business prosperity in a changing world.
- It introduces participants to the Transition Engineering and Innovation discipline, the engineering discipline and process that enables organisations to adapt to changing forward operating environment. This transition engineering training seminar enables operational staff and engineers to support the process from start to finish. At the start, it will enable participants to provide data that supports decision makers, and it will enable them to implement strategic change programmes into day to day energy and environmental management systems. It will equip participants to deal confidently with “wicked problems” that have many complex interacting factors, no obvious simple solution, and many potentially conflicted stakeholders.

This seminar will highlight:

- System Dynamics – How your organisation interacts with external change?
- How to make existing energy and environmental managements systems more useful
- Challenging unstated assumptions, asking the right questions
- Providing better operational support for strategic decision makers
- How to implement change programmes into day to day management systems

## OBJECTIVES

At the end of this training seminar, you will be able to:

- Collect and interpret data on system dynamics to support strategic decision makers
- Ask the right questions, challenge unstated assumptions, define better metrics
- Understand the operational aspects of the Transition Engineering discipline
- Advise and support strategic decision makers on the implementation of change programmes
- Contribute to corporate change towards sustainability by “thinking differently”

## TRAINING METHODOLOGY

- This training seminar includes various techniques to maximise understanding, retention and ability to apply the learning, including a course manual, suggested reading, presentations, individual and group exercises, video and group discussion.
- This course will be interactive and will challenge delegates to “think differently” about “sustainability” and about their part in delivering the strategic direction of their organisation. The instructor will guide delegates to apply the learning, and their understanding of their own organisations.

## ORGANISATIONAL IMPACT

Organisations will be better prepared to prosper in a changing future, based on:

- Better tools to understand how the organisation works within the wider operating environment
- The ability to see the future with clarity where there is obscurity
- The ability to support decisions with good data to replace a vague trust in “business as usual”
- The ability to implement a robust DIRECTION of future business strategy
- The ability to improve the existing capacity for designing and implementing change
- The ability to support long term business planning with stability and confidence

## PERSONAL IMPACT

Participants will gain a new way of thinking and greater satisfaction in their work on “sustainability”:

- Learn how to think differently – this on its own can be an eye-opening experience
- Gain a new engineering discipline - Transition Engineering
- Gain the ability to create more useful management systems and data
- Learn from the co-founder of the Global Association for Transition Engineering
- Become part of a global network of professionals tackling “unsustainability” challenges
- Become the person in your team with the clearest future vision

## WHO SHOULD ATTEND?

- This training course is suitable to a wide range of professionals but will greatly benefit:
- Staff in organisations that are dependent on engineered systems including manufacturing, transport, buildings and food, that are facing any “wicked problem” like climate change, energy supply or other environmental or resource challenges.
- Staff in operational roles responsible for energy, environmental and quality systems that support strategic decision makers
- Staff responsible for implementing programmes of change into day to day management systems

## Course Outline

### Introduction - The Importance of System Dynamics

- What is “Sustainability”?
- Overview of Global Problems of Unsustainability
- Systems Thinking and the Operating Environment
- The Importance of Energy in Society, Industry and Engineered Systems
- Historical Background to Current Global Challenges
- Introduction to Transition Engineering Methodology

### Identification of Risks of “Un-sustainability” - ISO Management Tools

- Understanding an Organisation in its Operating Environment - Past, Present and Future Changes
- Energy, Climate, Population - Why the future will not look like the past?
- Examples and Use of Future Scenarios
- The Unsustainability Challenges Facing my Organisation under “Business as Usual”
- Potential Usefulness of Environmental and Energy Management Tools
- Collecting Data about the Past, Present and Future of an Organisation

### Designing Metrics, Collecting Data, Describing Future Scenarios

- Using Data to Describe Systems and Challenge Unstated Assumptions
- Using Data to Describe the Forward Operating Environment
- Using Data to Describe Future System Constraints
- Un-sustainable and Sustainable Models for Economic Activity and Capital
- Achieving Resilience to External Change

### Overview of Strategic Planning, Starting a Change Programme

- Transition Innovation and Creating Path Break Solutions
- Designing a Path Break Solution for my Organisation – worked example
- Back-casting, Designing a Programme of Change
- Safe Operating Spaces for Organisational Change Programmes
- Re-Defining Competitive Advantage
- How to Start the Process of Change in an Organisation - trigger activities

### Implementation and Management Tools - Course Assessment

- How the Essentials of Management Systems Help to Implement Change
- Back-casting and Translating a Change Programme into Day to Day Management
- Examples of Management Tools for New Product Development and Construction
- Building and Managing Teams to Support Change
- Using Communications to Maintain Momentum
- Assessment - Multiple Choice Test