

Unveiling the next step in Energy Management

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raising standards worldwide™




Global Energy Demand



35%

2030

- World energy demand will increase by over 35% by 2030 as developing nations modernize and expand their economic output.
- This creates a nearly impossible scenario for secure, low carbon energy supplies to keep pace with demand



Energy getting
expensive and
scarce ?

Environmental Pressure

SPECIAL REPORT GLOBAL WARMING

T T A M

- Climate Change - CO₂
- Acid Rain - SO₂
- Smog - NO_x
- Mercury - (Hg)

SPECIAL REPORT GLOBAL WARMING

TIME

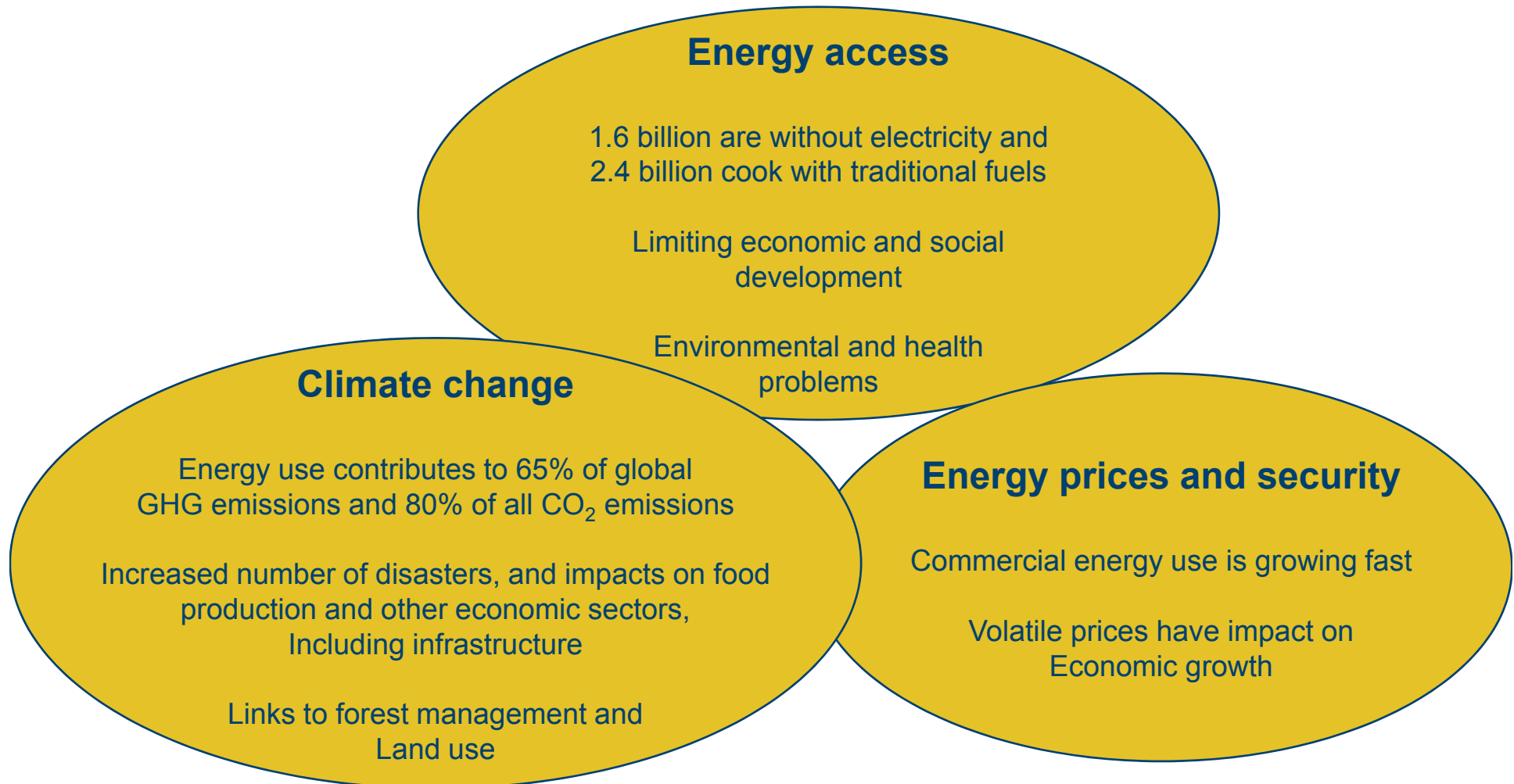
**BE
WORRIED.
BE **VERY**
WORRIED.**

Climate change isn't some vague future problem—it's already damaging the planet at an alarming pace. Here's how it affects you, your kids and their kids as well

**EARTH AT THE TIPPING POINT
HOW IT THREATENS YOUR HEALTH
WHAT YOU CAN HELP**



World Energy outlook



Key Challenges

- Global concerns about energy security are increasing and affect countries' international behaviour
- High oil prices affect national economies
- 1.6 billion poor people live without electricity and 2.4 billion cook with traditional fuels (mainly wood)
- 80% of global man-made CO₂ emissions come for the use of fossil fuels



Current Energy Management practices

- Practically the focus is on energy efficiency
- Optimization of Methods Improvement
- Technology Up gradation
- Application of alternative energy sources
- Reduction in carbon emissions
- Requires Energy Audits
- Improvement of power factor and energy efficient devices
- Energy Monitoring system



What are We to Do?

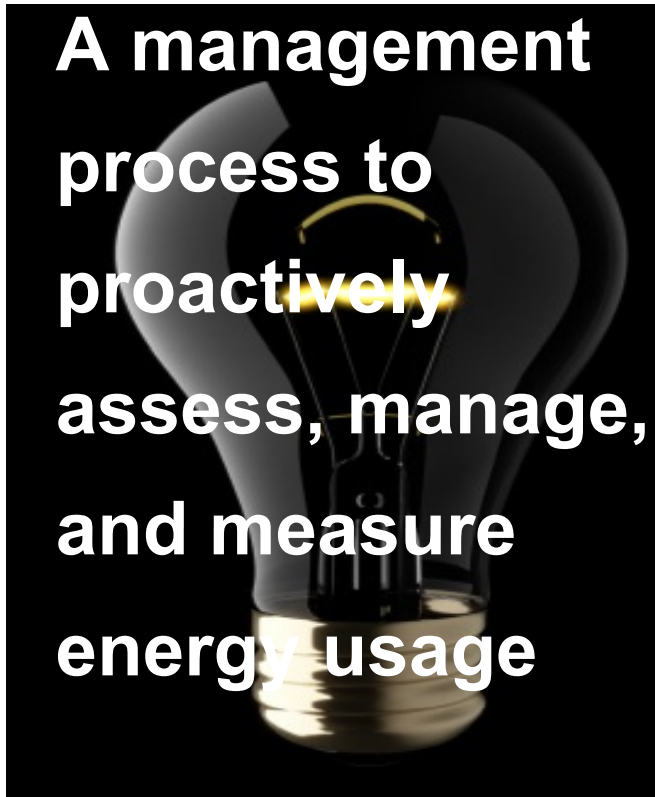
No one can control prices politics, or the global economy alone, but

It can manage how it uses energy



The response

A management process to proactively assess, manage, and measure energy usage



BS EN 16001



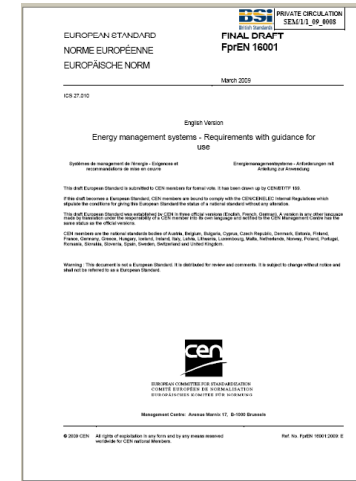
The response - An Energy Management System

What is Energy management System

- Set of interrelated or interacting elements of an organization to establish energy policy and objectives and to achieve those objectives
 - **energy policy** - statement by the organization of its intentions and principles in relation to its overall energy performance which provides a framework for action.
 - **energy objective** - overall energy goal, consistent with the energy policy that the organization sets itself to achieve

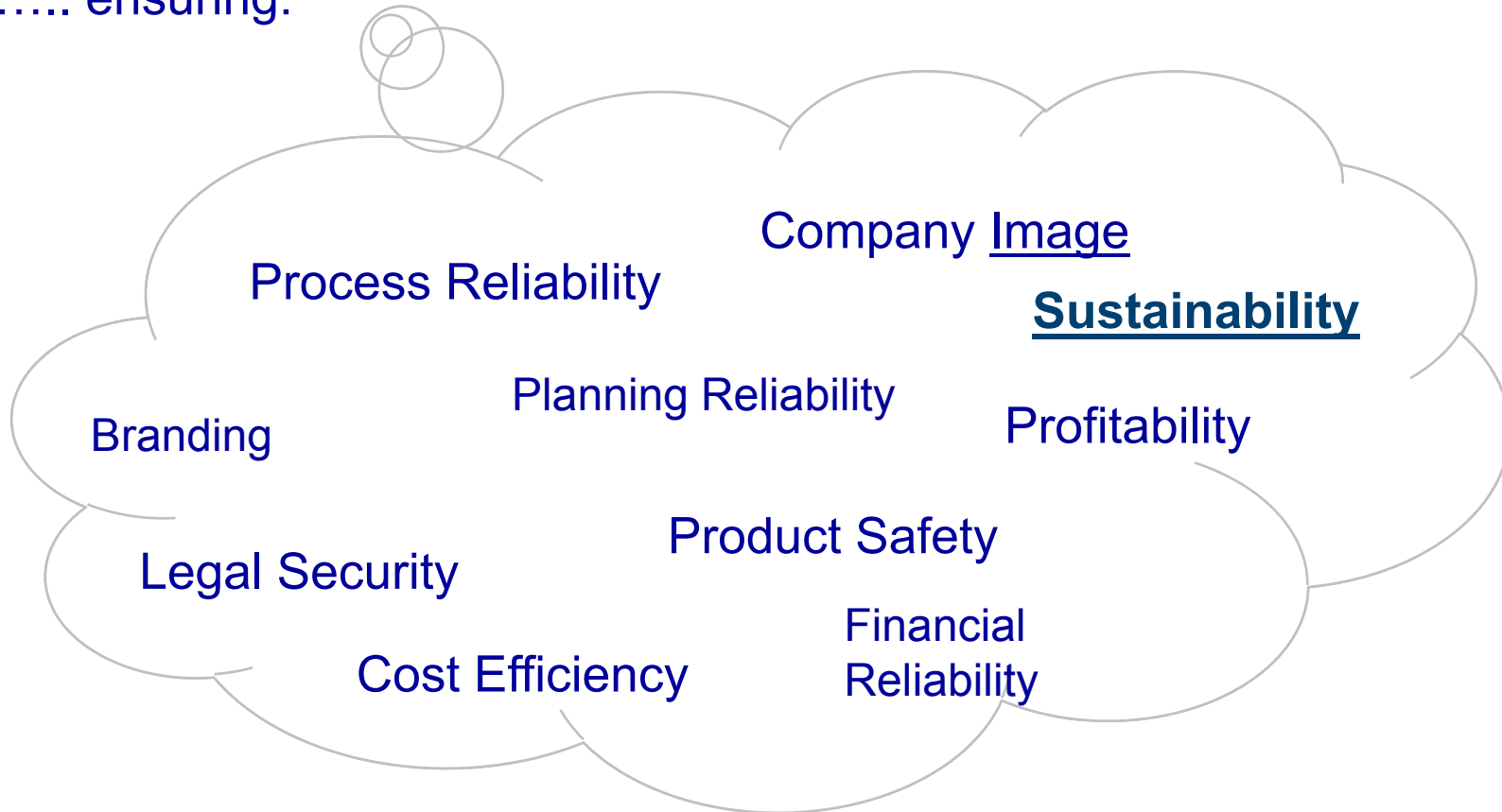
New Energy Standard – BS EN16001

- BS EN 16001 will help organizations establish the systems and processes necessary to improve energy efficiency.
- This should lead to reductions in cost and greenhouse gas emissions through systematic management of energy.
- It is intended to apply to all types and sizes of organizations and to accommodate diverse geographical, cultural and social conditions
- BS EN 16001 can be used independently or integrated with any other management system.

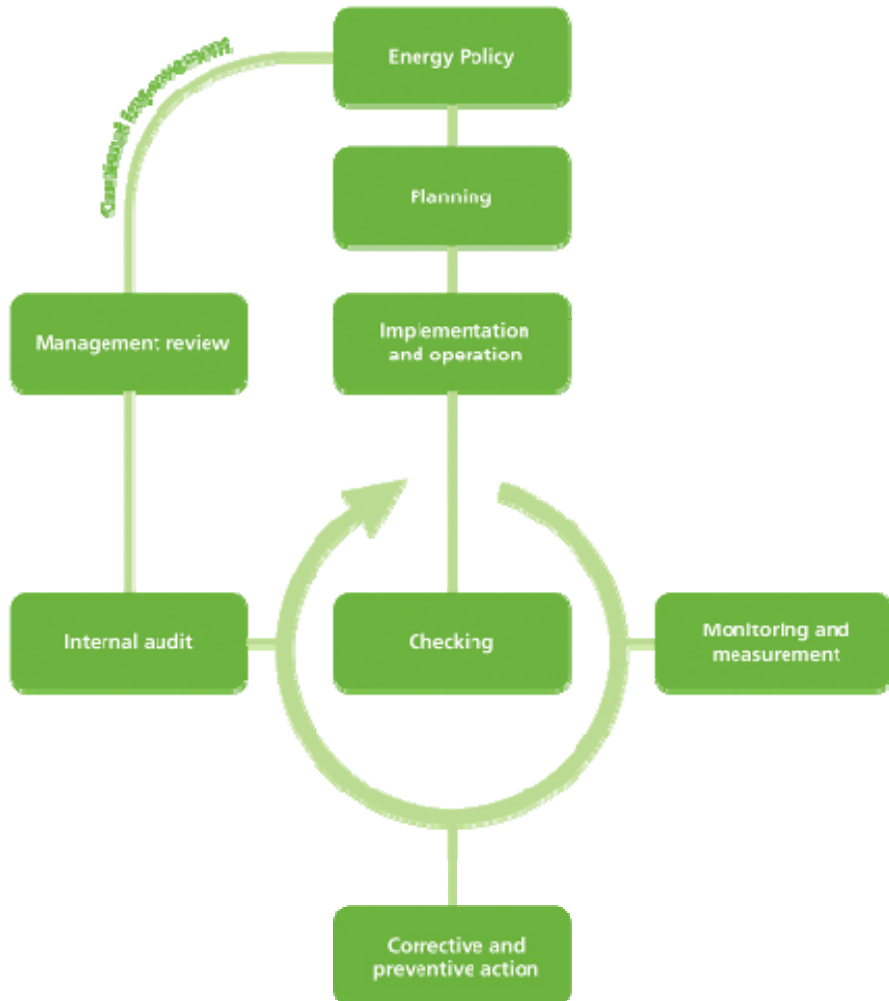


Energy Management Systems

..... ensuring:



Energy Management System Model



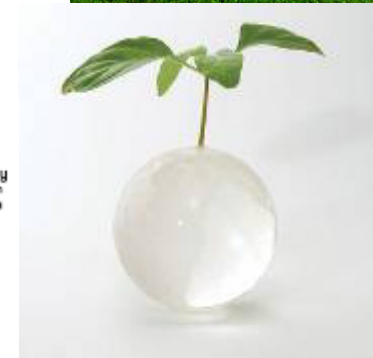
Standard Committee Participants (UK)

- Scientists, Engineers, Academics
- Energy Institute (oil & gas & power gen. professionals)
- Energy Services & Technology Association (consultants, auditors & practitioners)
- Major Energy Users Commission (corporations)
- The Carbon Trust (UK government, experts & industry)
- Energy Intensive Users Group (corporations)



Benefits of an Effective EnMS

- Improves efficiency and productivity
- Reduces energy variation, inefficiencies, and energy losses
- Facilitates continual improvement
- Improves the optimization of processes
- Improves employee motivation and participation
- Increases profitability



Benefits of an Effective EnMS

- Reduced energy costs through systematic management of energy
- Secure energy supply
- Optimize energy usage onsite
- Gain contractual advantage by avoiding high energy usage at peak time
- Comply with connection agreements
- Reduce carbon/GHG emissions
- Provides a specification for third party certification of energy management initiatives
- Prevent media induced product failure



EMS VS EnMS



Environment management system focuses on:

- Environment protection
- Prevention of pollution
- Waste management
- Environmental performance



Energy management system focuses on:

- Energy efficiency
- Energy conservation
- Energy management
- Energy performance

For any further information
On

Energy Management System (BS EN 16001: 2009)

Please Contact

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Thank YOU!