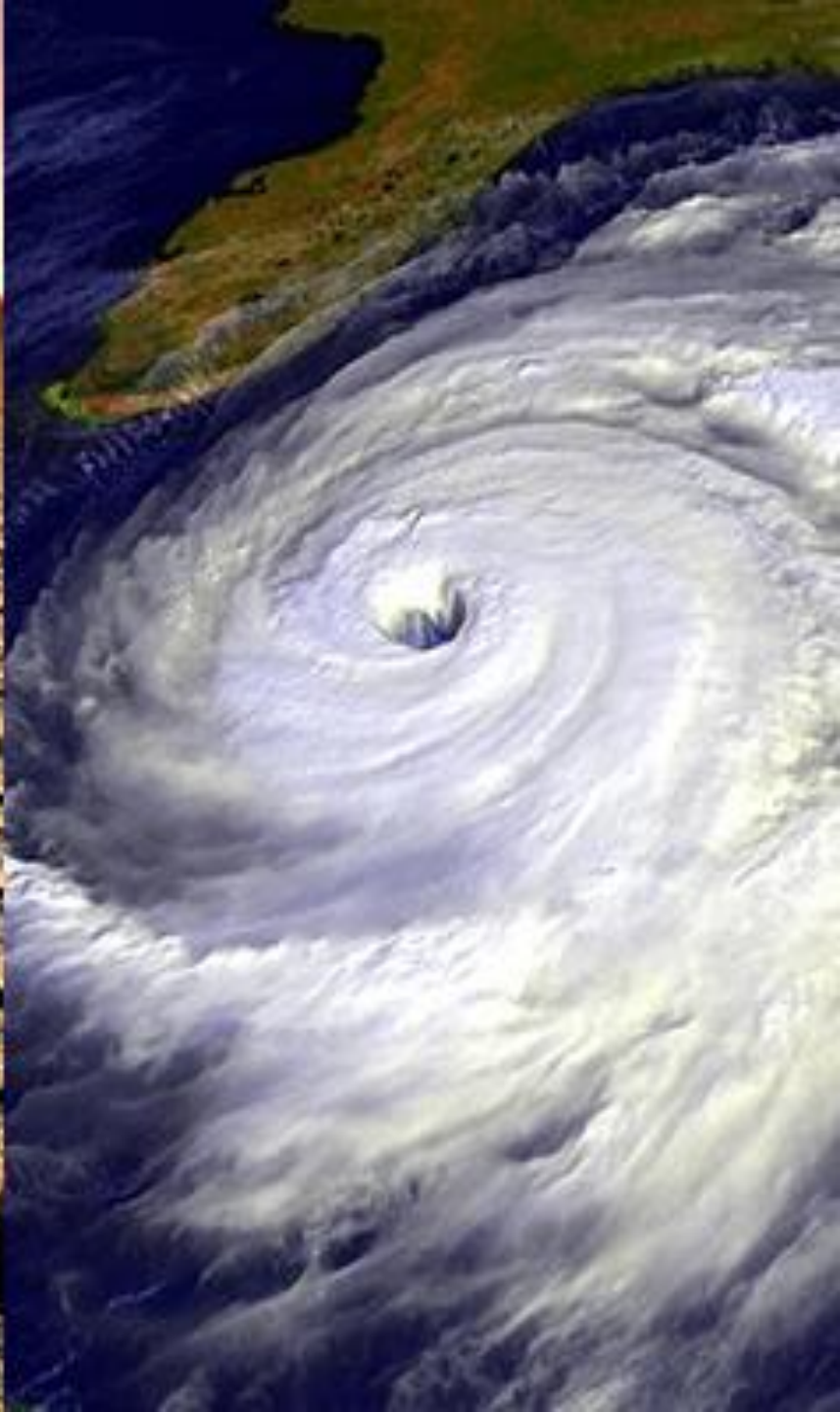


ISO50001



- ▶ Gerard Doherty, CEng
- ▶ UNIDO International Expert on Energy Efficiency and Energy Management
- ▶ Email: info@zerocarbon.ie




$$\text{CO}_2 = \text{P} \times \text{S} \times \text{E} \times \text{C}$$

PEOPLE

SERVICES
PER PERSON

ENERGY
PER SERVICE

CO₂
PER UNIT
ENERGY

Deloitte research has shown that organizations pursuing a systematic energy management approach

ARE ACHIEVING

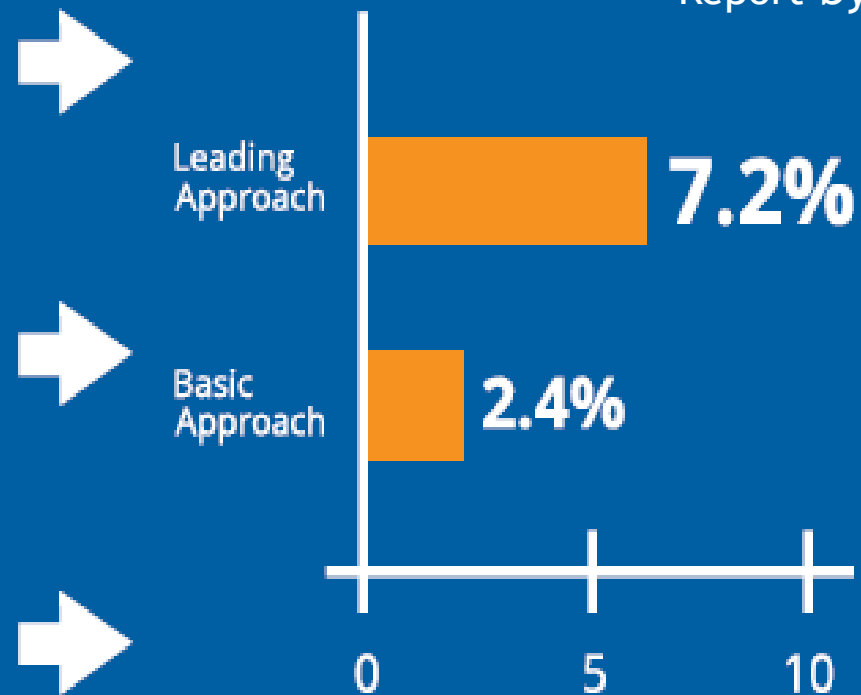
3 X MORE

SAVINGS

that those who do not

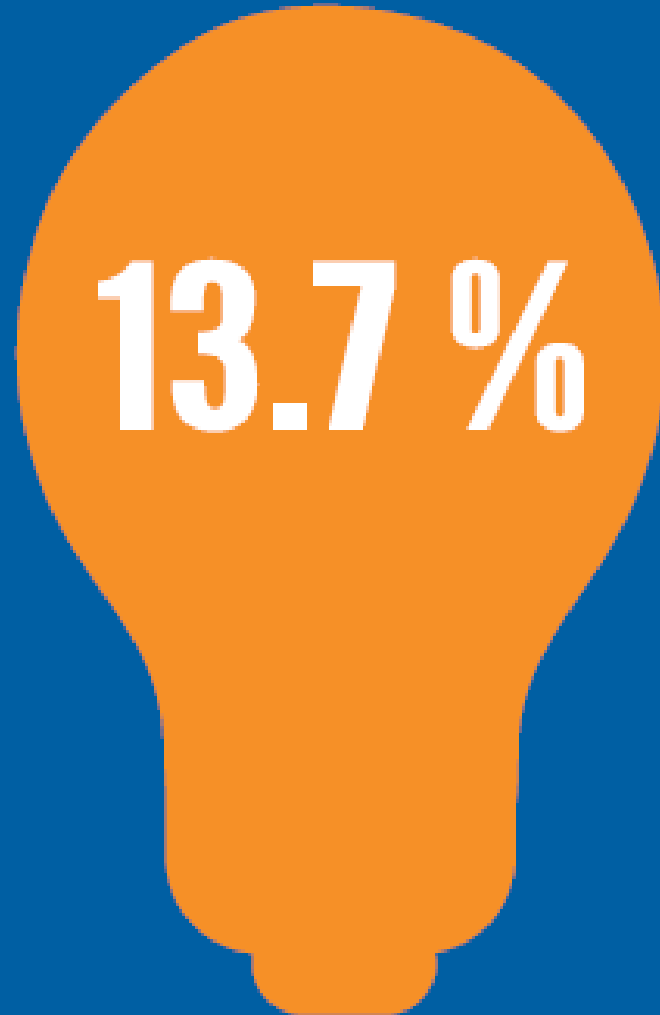
AVERAGE ANNUAL % REDUCTION

Report by Enerit

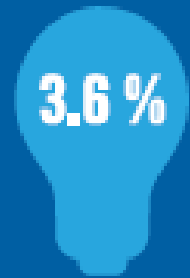


DID YOU KNOW ORGANIZATIONS WHO WERE GOOD AT ENERGY MANAGEMENT INCREASED AVERAGE QUARTERLY SAVINGS BY 10% AFTER SWITCHING TO A SYSTEMATIC APPROACH?

Systematic Approach



BUSINESS-AS-USUAL



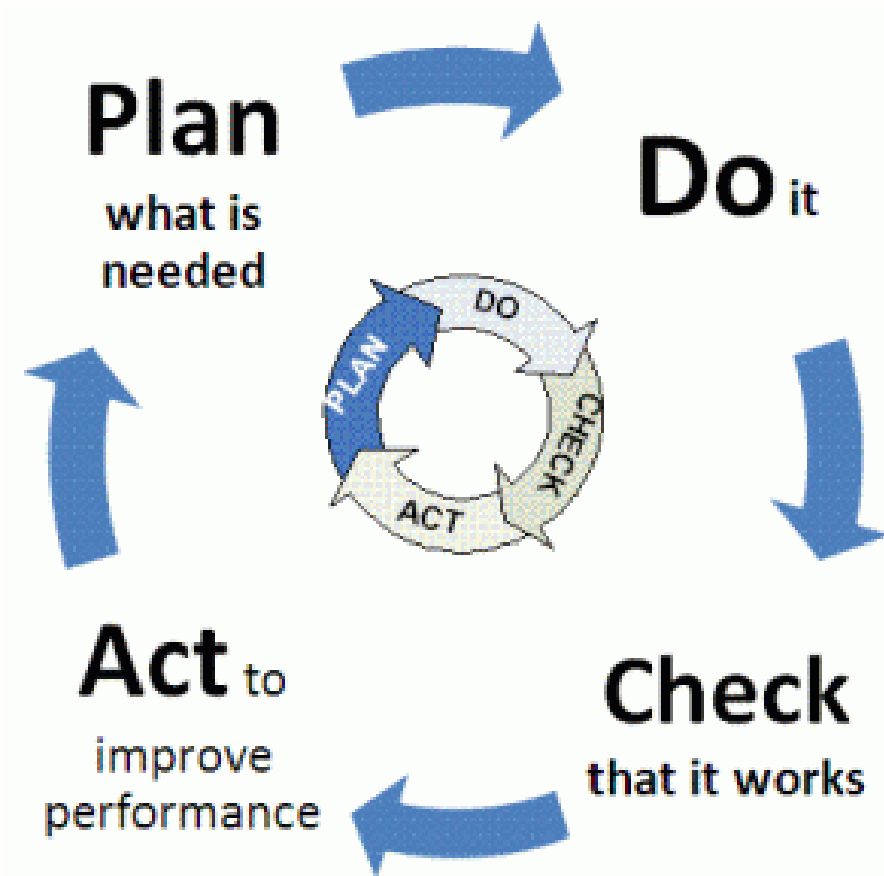
Report by Enerit

US 
Department of
Energy
Research



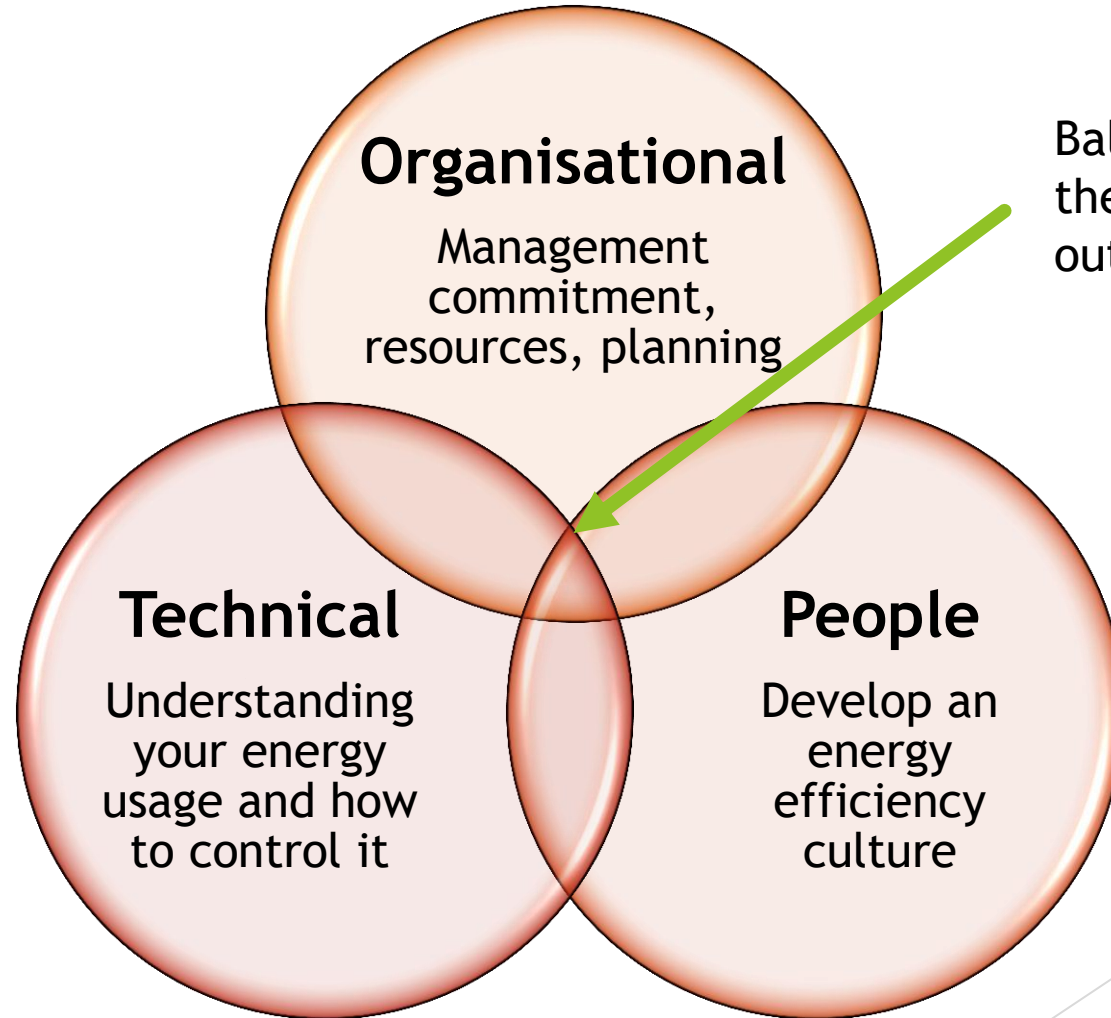
5 Steps to EnMS & ISO50001

- ▶ Step 1 - Management Commitment
- ▶ Step 2 - Plan
- ▶ Step 3 - Do
- ▶ Step 4 - Check
- ▶ Step 5 - Act





3 Elements to systematic Energy Management



Balance all 3 for the optimum outcome

New ISO50001 - New Structure



- ▶ All the ISO standards - 9001,14001,50001 etc. - will follow the same format - called the High Level Structure
- ▶ This should make it easier to adopt multiple standards if you already have 1 as they will all follow the same structure making it easier to integrate - more commonality means you don't have to keep re-inventing the wheel

ISO High level Structure



- ▶ 4. Context of the organisation
 - ▶ 5. Leadership
 - ▶ 6. Planning
 - ▶ 7. Support
 - ▶ 8. Operation
- ▶ 9. Performance Evaluation
 - ▶ 10. Improvement

Context



- ▶ Understanding the business environment you are working in and what risks and opportunities that provides
- ▶ Interested parties - stakeholders - customers, suppliers, shareholders, general public

Leadership



- ▶ ‘Leadership’ replaces ‘Management Responsibility’
- ▶ More focus on managements need to lead
- ▶ Needs to integrated into the business processes - not an add on



Performance Evaluation & Improvement

- ▶ Improvement has its own clause
- ▶ Energy performance improvement now defined
- ▶ Normalization of energy performance indicators (EnPI(s)) and associated energy baselines(EnB(s));
- ▶ Energy performance indicator (EnPI) and energy baseline (EnB) text has been clarified to improve understanding of these concepts.
- ▶ ISO50003, which applies to auditors, prohibits (a) the initial certification of organisations that cannot already prove energy performance improvement and (b) recertification of those that have not subsequently achieved continual performance improvement.



ISO50001 Potential

- ▶ Industry & commercial sector responsible for 40% of CO2 emissions
- ▶ 20,000 organisations certified by end 2016
- ▶ 50% implementation in the industry and service sector by 2030 saves
 - ▶ \$700bn
 - ▶ 6500 Million tonnes of CO2
 - ▶ Equivalent to removing 210 million passenger vehicles off the road



CLIMATE SUMMIT

WHAT IF IT'S
A BIG HOAX AND
WE CREATE A BETTER
WORLD FOR NOTHING?

- ENERGY INDEPENDENCE
- PRESERVE RAINFORESTS
- SUSTAINABILITY
- GREEN JOBS
- LIVABLE CITIES
- RENEWABLES
- CLEAN WATER, AIR
- HEALTHY CHILDREN
- etc. etc.



YOUNG
PEOPLE
FOR
THE
USA
AND
CANADA

ISO 50001 : Energy Management Standard

