

# **SUSTAINABLE ENERGY MANAGEMENT PRACTICES TO ACHIEVE BUSINESS AND SUSTAINABILITY GOALS**

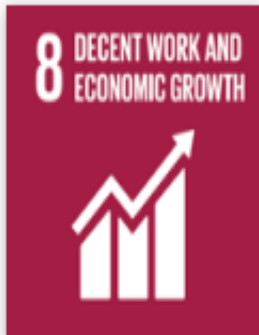
By  
**ZAINI ABDUL WAHAB**  
Energy Management Consultant

# OUTLINE

- **SUSTAINABLE DEVELOPMENT GOALS AND SUSTAINABILITY PRACTICES IN COMPANIES**
- **STRATEGIES TO REDUCE ENERGY COSTS THROUGH SUSTAINABLE ENERGY MANAGEMENT SYSTEM IMPLEMENTATION?**
- **THE CONCLUSIONS AND THE WAY FORWARD**



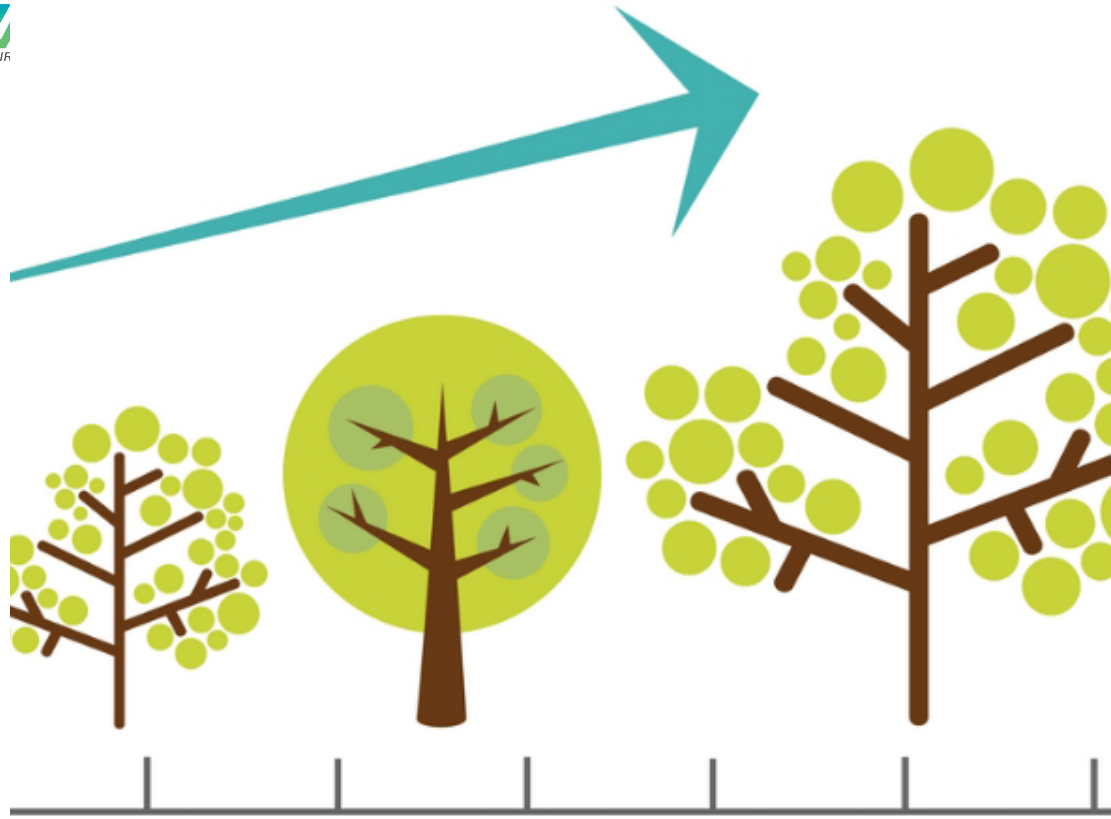
# SUSTAINABLE DEVELOPMENT GOALS



# Goal 12: Ensure Sustainable Consumption And Production Patterns

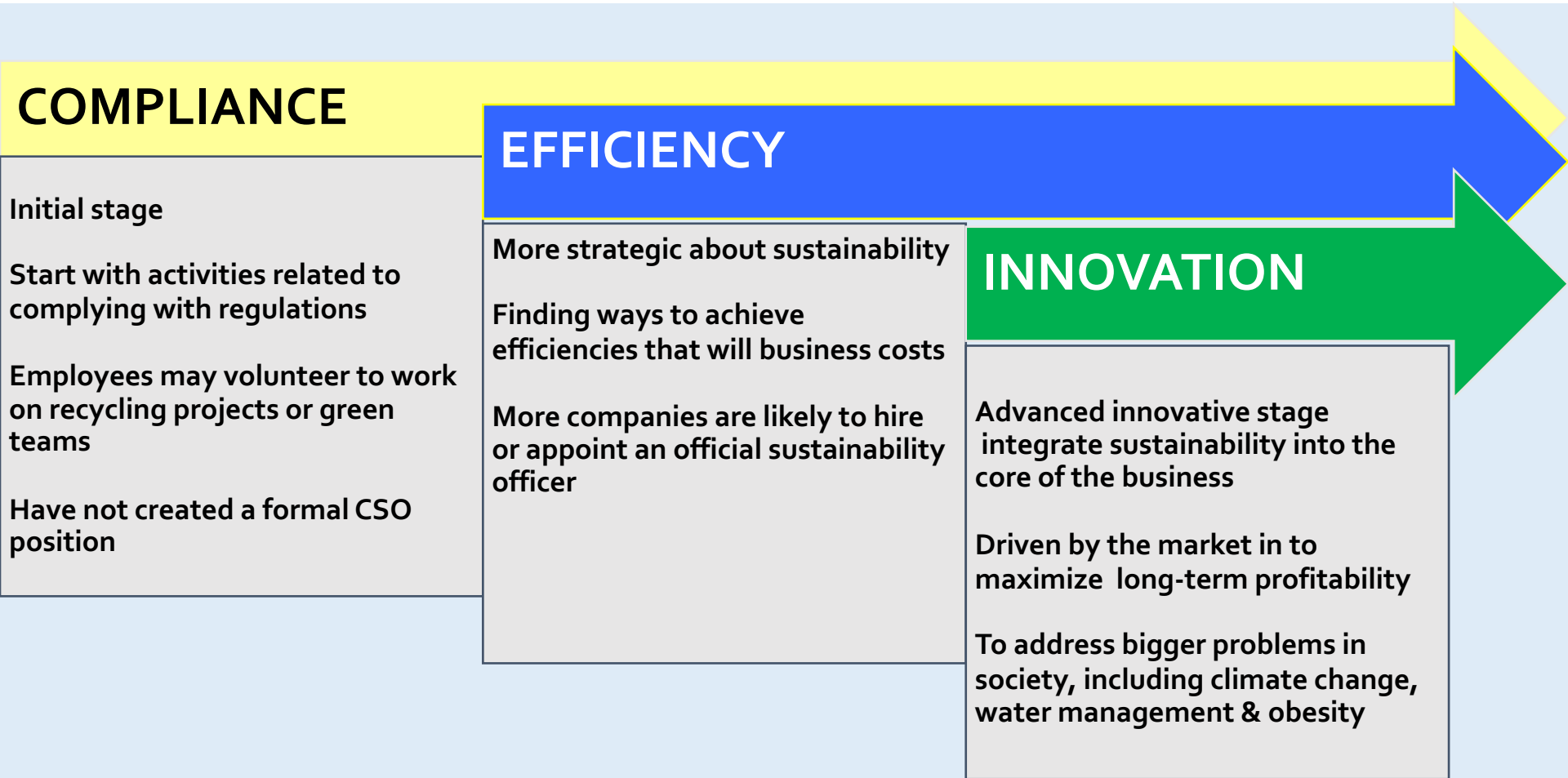
## Targets

- ▶ Implement the 10-year framework of programmes on sustainable consumption and production, all countries taking action, with developed countries taking the lead, taking into account the development and capabilities of developing countries
- ▶ By 2030, achieve the sustainable management and efficient use of natural resources
- ▶ By 2030, halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses
- ▶ By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment
- ▶ By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse
- ▶ Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle
- ▶ Promote public procurement practices that are sustainable, in accordance with national policies and priorities
- ▶ By 2030, ensure that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature
- ▶ Support developing countries to strengthen their scientific and technological capacity to move towards more sustainable patterns of consumption and production
- ▶ Develop and implement tools to monitor sustainable development impacts for sustainable tourism that creates jobs and promotes local culture and products
- ▶ Rationalize inefficient fossil-fuel subsidies that encourage wasteful consumption by removing market distortions, in accordance with national circumstances, including by restructuring taxation and phasing out those harmful subsidies, where they exist, to reflect their environmental impacts, taking fully into account the specific needs and conditions of developing countries and minimizing the possible adverse impacts on their development in a manner that protects the poor and the affected communities



# IN COMPANIES WORLDWIDE

- Energy & sustainability gradually becoming combined in order to enable an organization to maintain & grow their economic, social & environmental capital base while actively contributing to sustainability in the political domain
- Sustainability-the measure to achieve business goals & increase long-term shareholders' value by integrating economic, environmental & social growth opportunities into the company's strategies



**STAGES THAT COMPANIES ARE OFTEN ENGAGED IN SUSTAINABILITY**

# RULES IN SETTING SUSTAINABILITY GOALS

- Reach for goals that will benefit the business & expand opportunities
- Senior management must be committed to the goals
- Must be integral to the business operational activities – systematic approaches
- Ensure the targets are credible & achievable
- Prioritize towards areas for the most meaningful impact & generate the biggest results
- Publishing sustainability goals with a clear roadmap as to how they can be achieved in reality
- Source ideas from employees to what sustainability goals should be set
- Establish goals that have real traction with customers and consumers
- Collaboration & working with external stakeholders
- Elements to position the company as a good corporate citizen



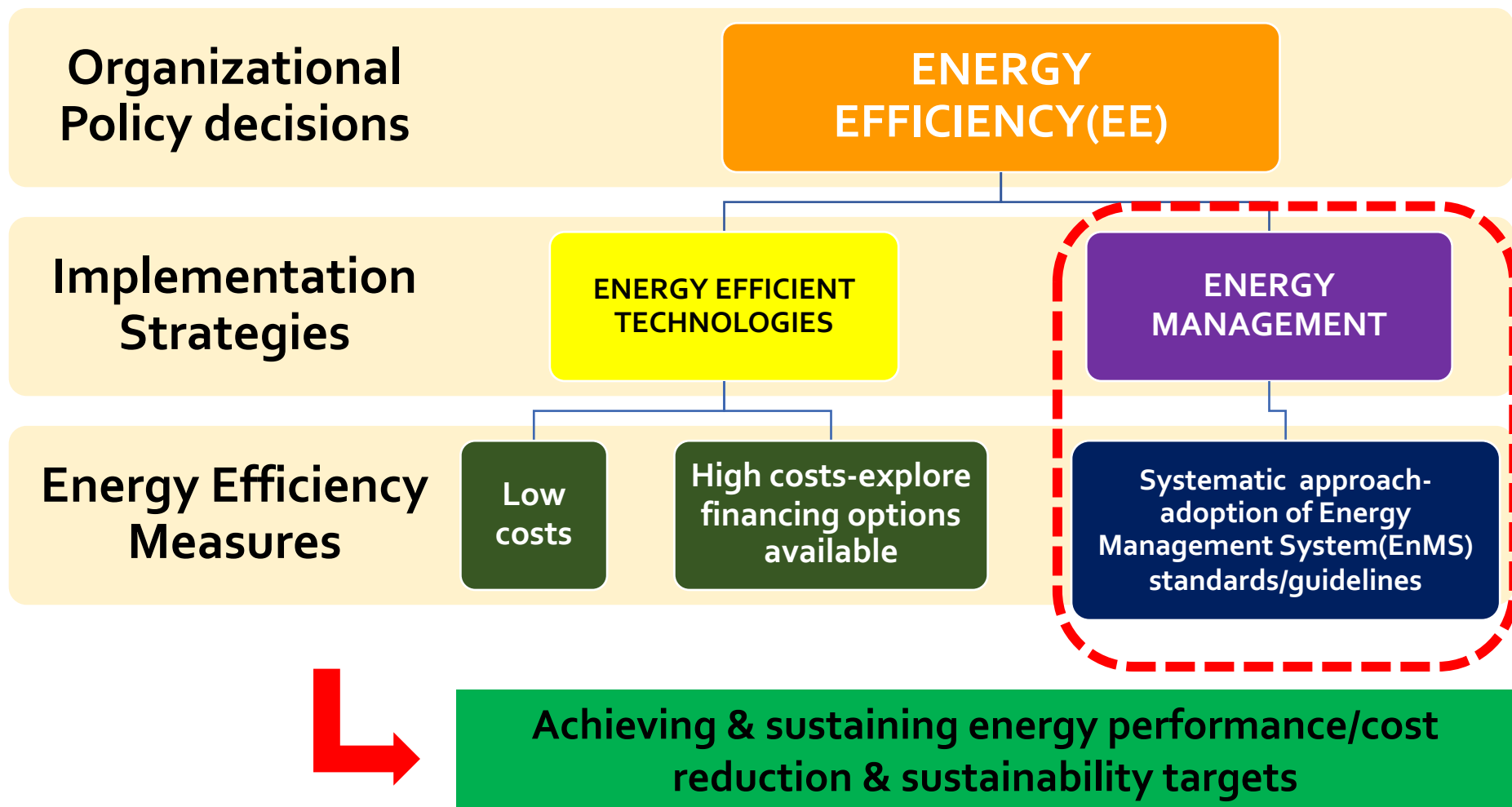
# **SUSTAINABLE ENERGY MANAGEMENT-**

**The process of  
monitoring,  
controlling &  
conserving  
energy in a  
building/  
organization**

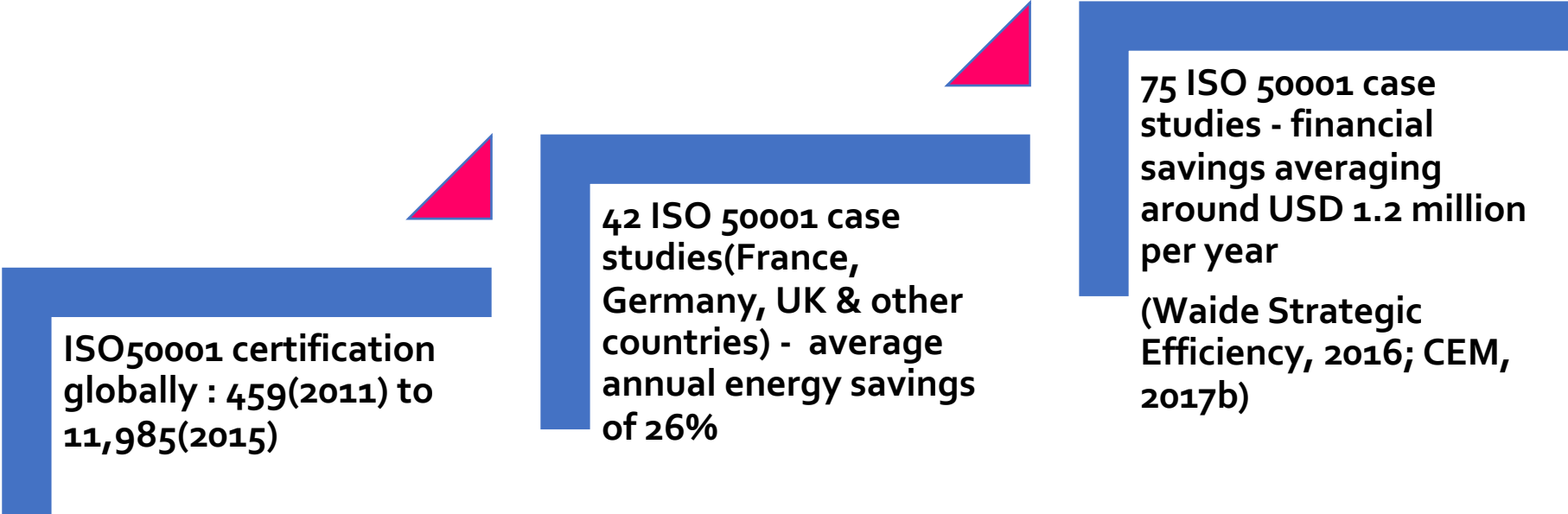
- **Metering energy consumption & collecting the data**
- **Finding opportunities to save energy & estimating how much energy each opportunity could save**
- **Taking action to target the opportunities to save energy**



# THE HOLISTIC APPROACH TO REDUCE ENERGY COSTS-ACHIEVING BUSINESS & SUSTAINABILITY GOALS



# THE ADOPTION OF ENERGY MANAGEMENT SYSTEM IS GROWING GLOBALLY



ISO50001 certification globally : 459(2011) to 11,985(2015)

42 ISO 50001 case studies(France, Germany, UK & other countries) - average annual energy savings of 26%

75 ISO 50001 case studies - financial savings averaging around USD 1.2 million per year  
(Waide Strategic Efficiency, 2016; CEM, 2017b)

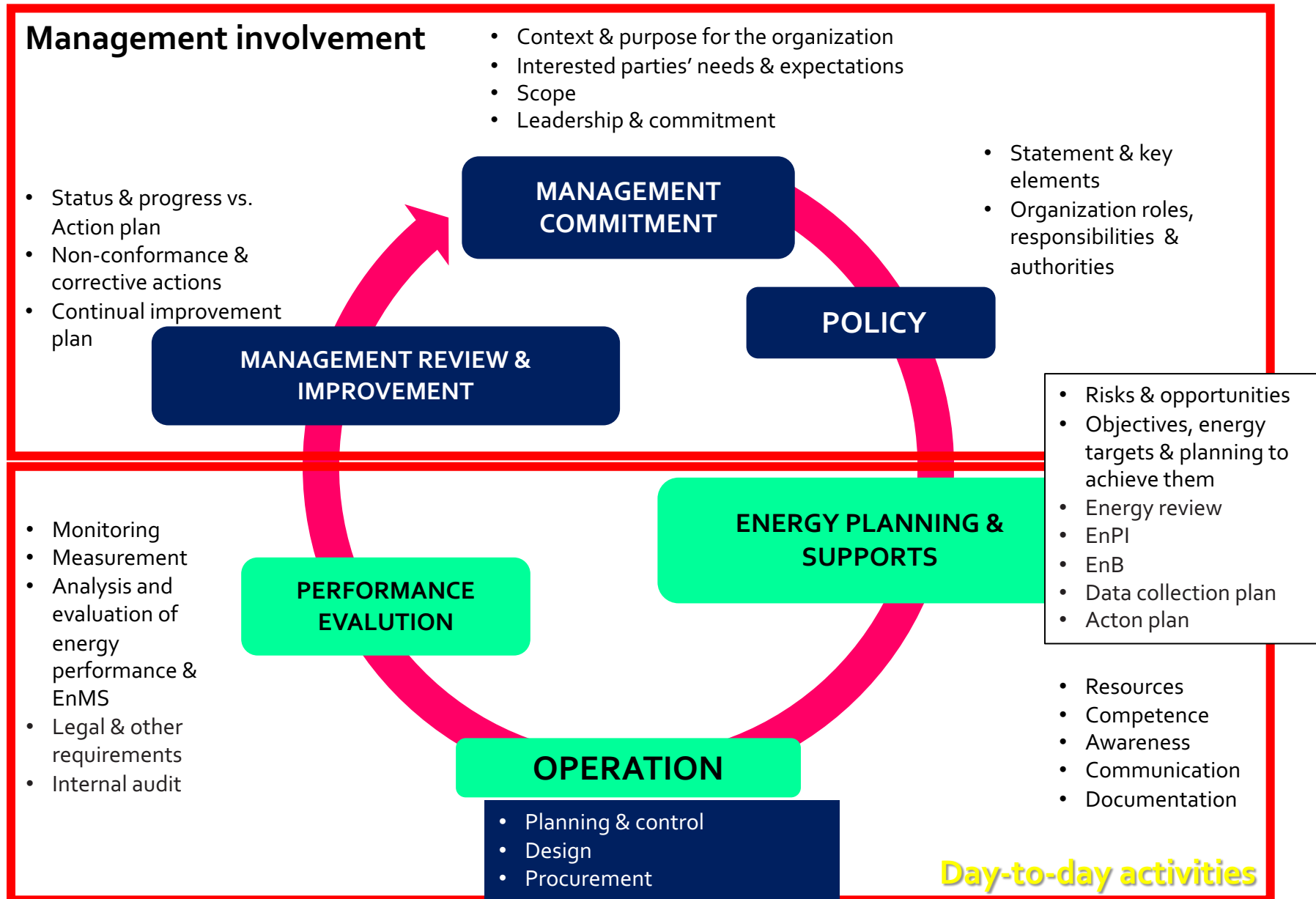
Broad implementation of ISO 50001 across service and industrial sectors globally (50% global uptake by the year 2030)

- could drive cumulative [delivered] energy savings of approximately 62 exajoules [100 exajoules of primary energy] by 2030
- saving over \$600 billion in [delivered] energy costs [\$700 billion in primary energy costs]
- avoiding 6,500 Mt of CO<sub>2</sub> emissions

The projected annual emissions savings in the year 2030 are equivalent to removing 215 million passenger vehicles from the road [by the year 2030]"

(The White House, 2016)

# Sustainable Energy Management System Framework



# COMPANIES THAT ARE EFFECTIVE AT DOING ENERGY MANAGEMENT OFTEN...



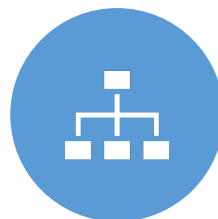
**Exhibit a broad awareness of the benefits of energy efficiency throughout the organization**



**Collect and analyze information to manage their energy use**



**Have an energy management plan—short term and long term**

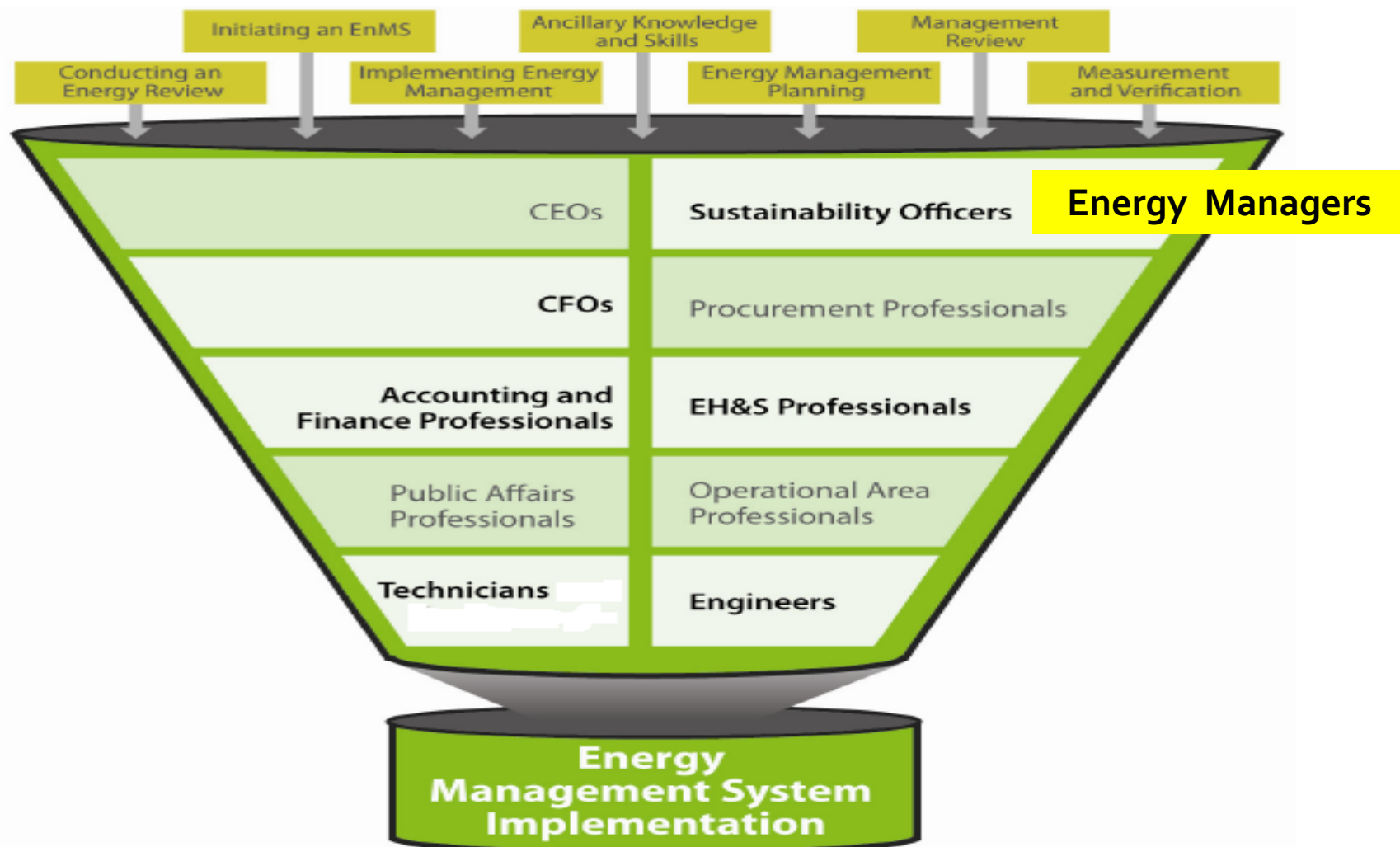


**Integrate the task of managing energy into the overall management structure of the organization**



**Provide leadership for energy management through a “champion” or group of committed staff—an energy management team—and, perhaps have top-down commitment expressed in the form of an energy policy**

# EFFECTIVE ENERGY MANAGEMENT SYSTEM IMPLEMENTATION:WHO ARE INVOLVED?



# THE CONCLUSIONS AND THE WAY FORWARD



Energy management need to be seen as one of the strategic business activities-not just as the support services



Energy management is one of the key and integrated elements in corporate sustainability practices to improve business performance & sustain profitability

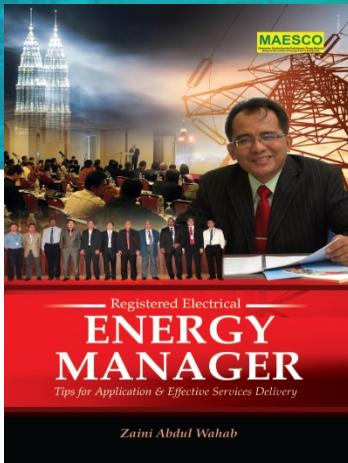
# THANK YOU

## Energy Management Consultant

Specializing in reducing your operational cost & maximizing your profits

Let Me Introduce Myself

See How I Can Help



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