

# On the Environmental Horizon: Energy Management and e-Stewards

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## **ISO 50001**

### **Energy Management System<sup>1</sup>**

### **EnMS (Draft)**

What is it and  
When is it coming?

Users have limited control prices,  
politics, or the global economy, but  
Organizations can manage how they  
use energy

It is much more **cost-effective to build in** energy efficiency the first time than retrofit it later.

In industry, a missed opportunity for energy efficiency may not reoccur- **for decades or at all** until the original installation fails or becomes obsolete

International Organization for Standardization (ISO) is initiating a broad portfolio of initiatives to promote energy efficiency, including ISO 50001.

An EnMS provides a method for integrating energy efficiency into existing industrial management systems for continual improvement.

All existing and planned EnMS are compatible with ISO 9000/14000<sup>2</sup>

### **EnMS could:**

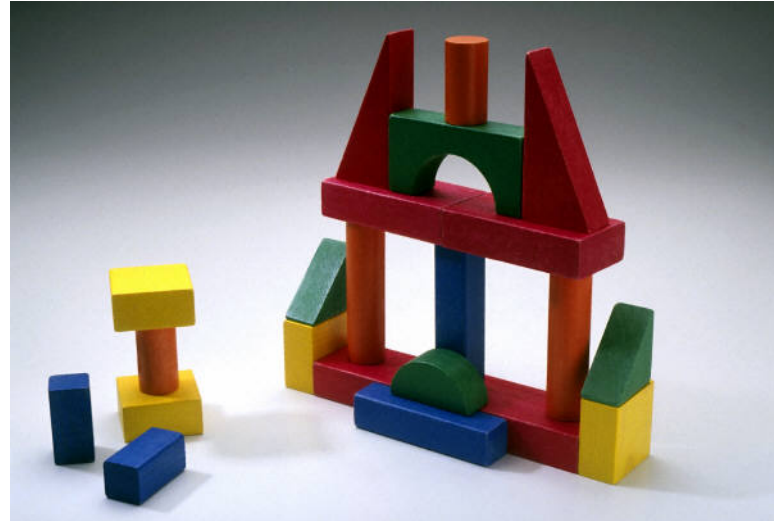
be applied to help all types of organizations to take a systematic approach to the continual improvement of energy performance

encourage more efficient and more sustainable use of energy, irrespective of the type of energy and facilitate reporting and validation

address energy supply, procurement practices for energy using equipment and systems, energy use, and any use-related disposal issues

## On the Environmental Horizon: Energy Management and e-Stewards

- Policy
- Management Responsibility
- Document Control
- Records Control
- Training
- Internal Audit
- Corrective/Preventive Action
- Management Review



**ISO 50001 will use  
common building  
blocks of existing  
management system  
standards**

## On the Environmental Horizon: Energy Management and e-Stewards

- Energy planning
- Energy profile  
(data management)
- Energy performance  
improvement metrics
- Energy objectives and targets  
for improvement
- Measuring and monitoring  
energy improvement

**ISO 50001 will provide a  
means to  
demonstrate energy  
performance.**



**EnMS will provide a practical approach to improving energy efficiencies, reducing costs and improvements in the environmental footprint of the implementing organizations by combining both the technical aspects of energy management and the strategic management aspects.**

This standard specifies requirements for an EnMS, which enables an organization to take a systematic approach to the continual improvement of energy efficiency and performance.

It does not itself state specific performance criteria with respect to energy.

It is anticipated to be available in late 2010 or 2011.

## E-Stewards: Management of End-of-Life Electronics

Every year millions of tons of electronic waste, or e-waste are sent for recycling. However, a significant portion of these materials are not recycled, but shipped off-shore to be broken down to economically viable parts and the remainder disposed of in the most convenient manner

The purpose of the e-Waste Standard is to set appropriately rigorous, yet practical and readily achievable parameters for globally responsible practices for the electronics recycling and asset management industries, including recyclers, processors, refurbishers, asset managers, refiners, and re-deployment companies.

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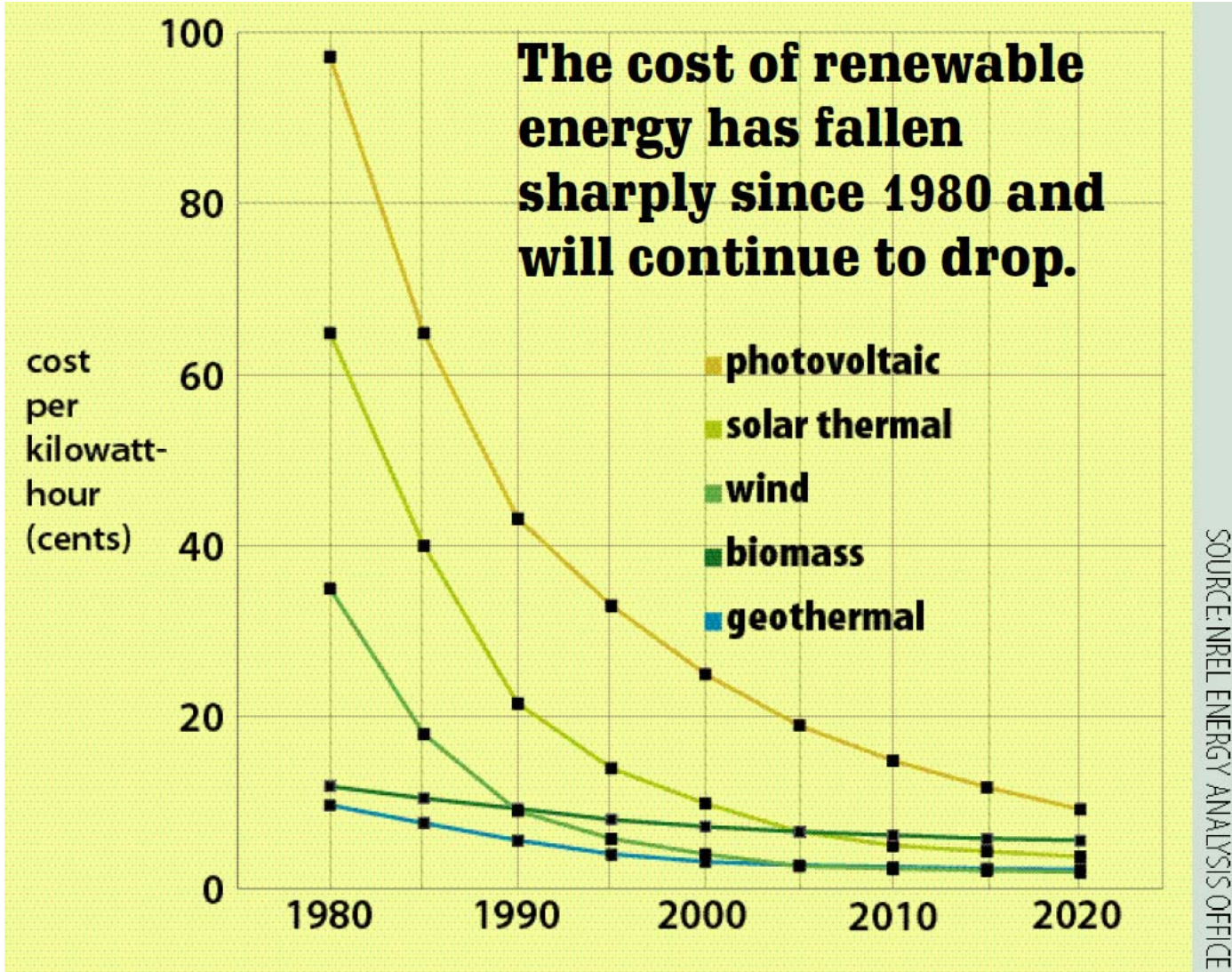
This e-Stewards Standard fully incorporates the requirements of the Environmental Management Systems Standard, ISO 14001-2004<sup>©</sup> ISO, the principles of the SA 8000 social accountability standard, as well as the Basil Action Network (BAN) performance requirements.

The term “environmental management system” (EMS), as used throughout the Standard, includes within its scope all of the environmental, occupational health and safety, and responsible recycling and reuse requirements identified in this Standard.

Cheap overseas labor, US prison populations, and solid waste landfills and incinerators are not acceptable ways to get rid of our old toxic electronics.

Not only do they poison the poorest and most vulnerable, they ravage the environment and put highly persistent poisons directly into the food chain — our food chain.

# On the Environmental Horizon: Energy Management and e-Stewards



Reference 6.

## On the Environmental Horizon: Energy Management and e-Stewards

With strong economic incentives to export e-wastes, including materials considered hazardous waste by recipient countries; with few controls in place in the US to prevent this export; and with customers unable to determine how to truly hold their recyclers / asset recovery companies accountable, there is a dire need for independent on-site auditing by trained and accredited certification bodies that assure compliance with the most environmentally and socially responsible standard.

## On the Environmental Horizon: Energy Management and e-Stewards

Wires from Computers are removed, sorted, insulation burned off and sold as scrap metal.

Workers sorting wires prior to burning.





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## References:

1. Energy Management System Standard ISO 50001 Baseline Presentation, US TAG
2. International Organization for Standardization (ISO)
3. Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal
4. Synopsis of the e-Stewards Standard for Responsible Recycling and Reuse of Electronic Equipment
5. The e-Stewards Certification Program Brochure – Basel Action Network
6. Sustainable Strategies for the Low Carbon Economy Global Sourcing after the Meltdown: In Search of Sustainability, June 3, 2009, The Philippines Cultural Center, New York, Steven Stokes