Choosing the Most Appropriate Environmental Management System for an Institution of Higher Education

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Drivers Towards Sustainability

Drivers are “what prompts the organization to undertake environmental action. Different drivers influence whether the organization undertakes the EMS, and the focus within the environmental management system. Unlike businesses, key drivers for a university are not due to external forces such as diligence or market influence; instead, drivers tend to be based around internally-driven responsibilities for the environment, health and safety” (Clarke & Kouri).Drivers Towards Sustainability

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1st Generation Drivers
- Compliance: This driver addresses compliance with both mandatory and as voluntary regulations. Cost avoidance from penalties is a consideration.
- Energy: Energy concerns comprise both cost savings from energy not used, and carbon reduction concerns.

2nd Generation Drivers
- Internal Population: Addresses internal drivers of faculty, staff, and students both current and prospective. A strong environmental program can result in happy employees and improved productivity. Universities’ reputation in regards to sustainability can be a strong levering point in retaining existing as well as attracting new students and faculty.

3rd Generation Drivers
- Community/Public Relations: Institutions of higher ed have a desire to maintain a strong environmental record in their communities and in the public opinion.
- Knowledge/Education: With the primary mission of creating knowledge, most institutions of higher education also feel a responsibility to share the knowledge gained through their sustainability journey.

EMSes Evaluated as Part of Guide

ISO 14001
- Developed by the International Standards Organization, who also developed quality control standards. ISO is used in commercial sector, but has been successfully applied in higher ed. A successful case study of this application is Gavle University in Switzerland. This system is internationally known and respected. This reputation best addresses the second and third generation drivers of internal and external populations, that demand accountability.

Osnabruck
- Developed 5 years prior to ISO 14001, at Osnabruck University, Germany. This EMS is higher-ed specific and is very structured. There are ten building blocks of environmental management that provide detailed steps through the basic plan, do, check, act cycle. This EMS utilizes a Life Cycle Assessment to set very specific environmental performance goals. Osnabruck is best suited to address first generation drivers.

SC-SUI
- This EMS was developed by three large institutions in South Carolina. It has a looser framework than either ISO 14001 or Osnabruck, that accommodates multiple campuses or institutions. The accountability component of the SC-SUI is a software that can be accessed by all participants. The software allows for the sharing of knowledge and information, thus addressing the third-generation driver for knowledge sharing and educational responsibility.

Figure 1: Management System Model (as King)

Figure 2: Decision Tool: to be utilized in conjunction with guide, after evaluating and identifying institutional drivers (as King)