



Integrating Sustainability and EMS

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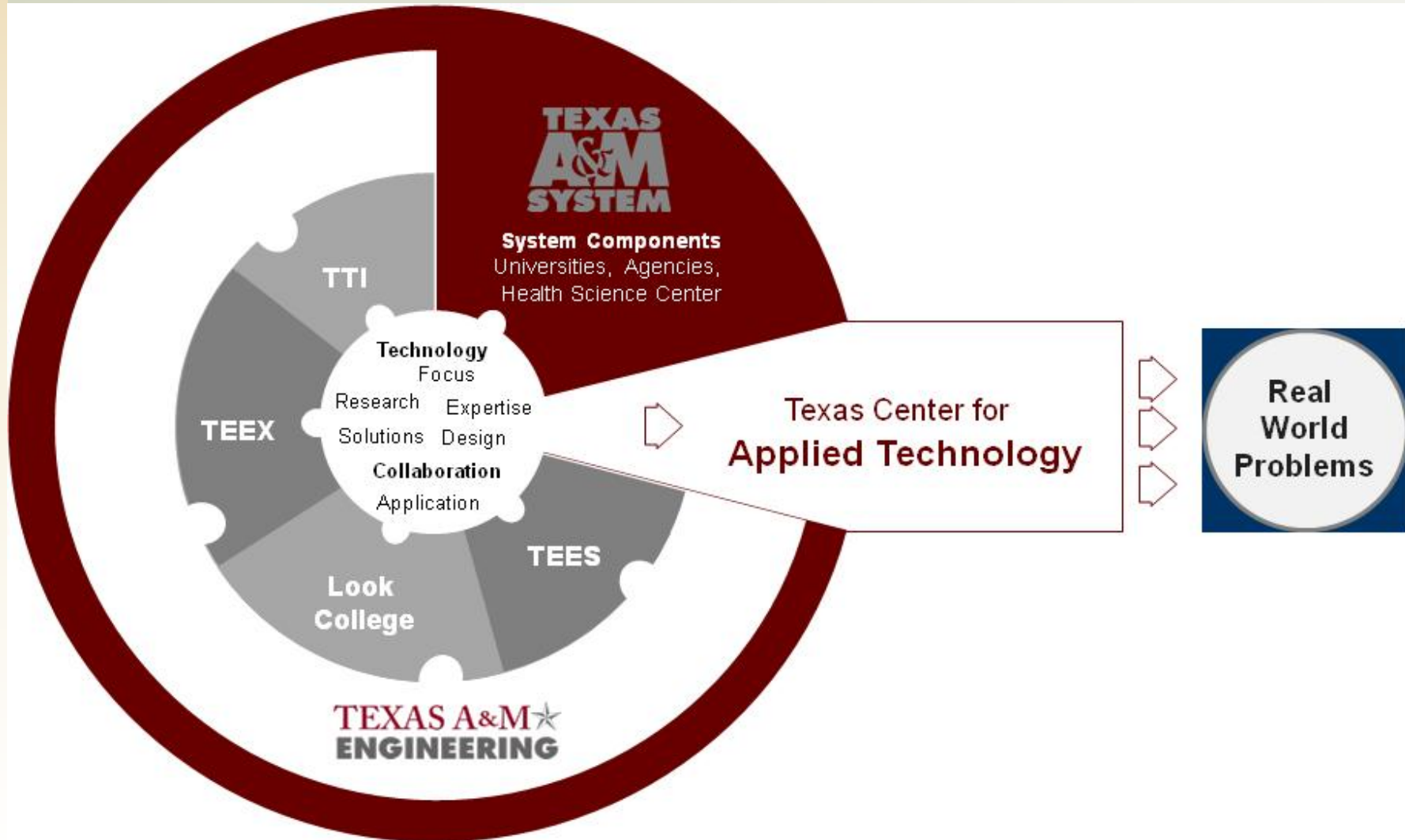
Texas Engineering Experiment Station

Texas A&M University System

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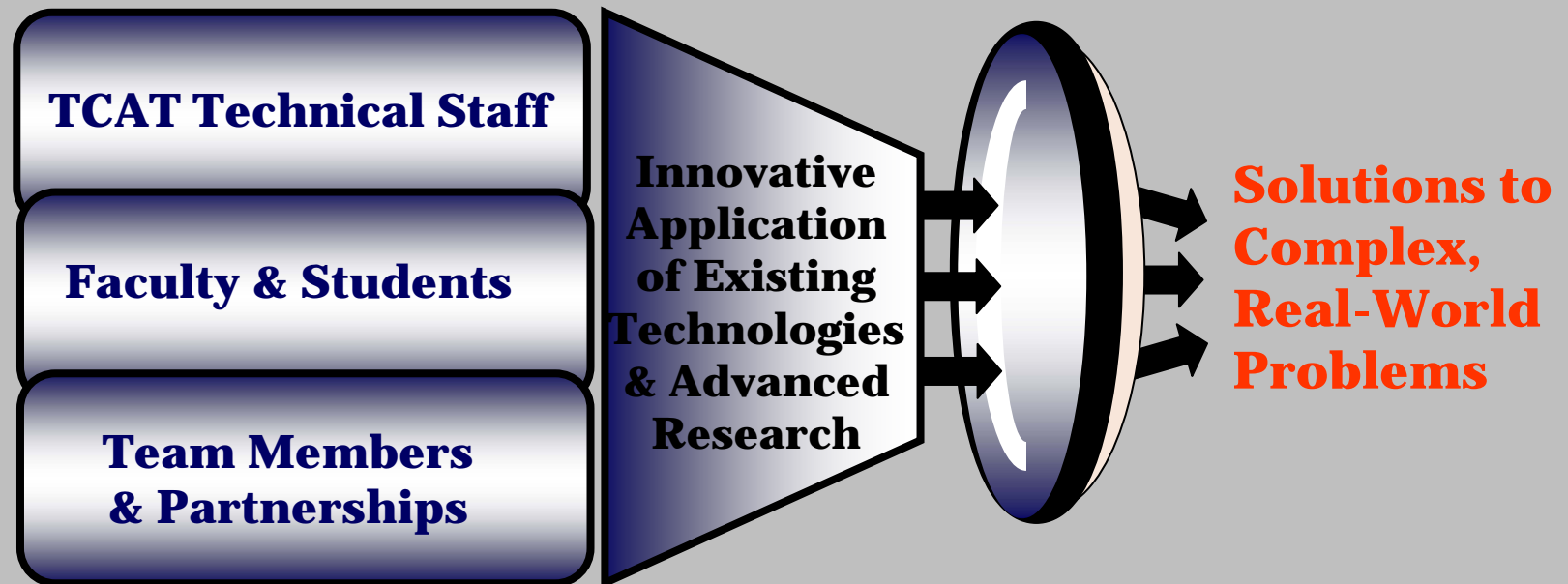
Who We Are



Texas Center for Applied Technology

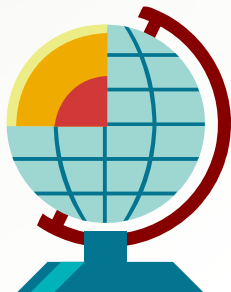
How We Work

Driven by Global Needs



Global Roles are Evolving

- Growing need to merge Environmental Management Systems (EMS) with Sustainability with Health/Safety
- Substantial rise in demand for a new breed of environmental/health/safety/sustainability leaders and staff
- Growing hunger for technical and admin staff to have the strategic planning, persuasive communication and broad visionary skills of their leaders



The Gathering Storm

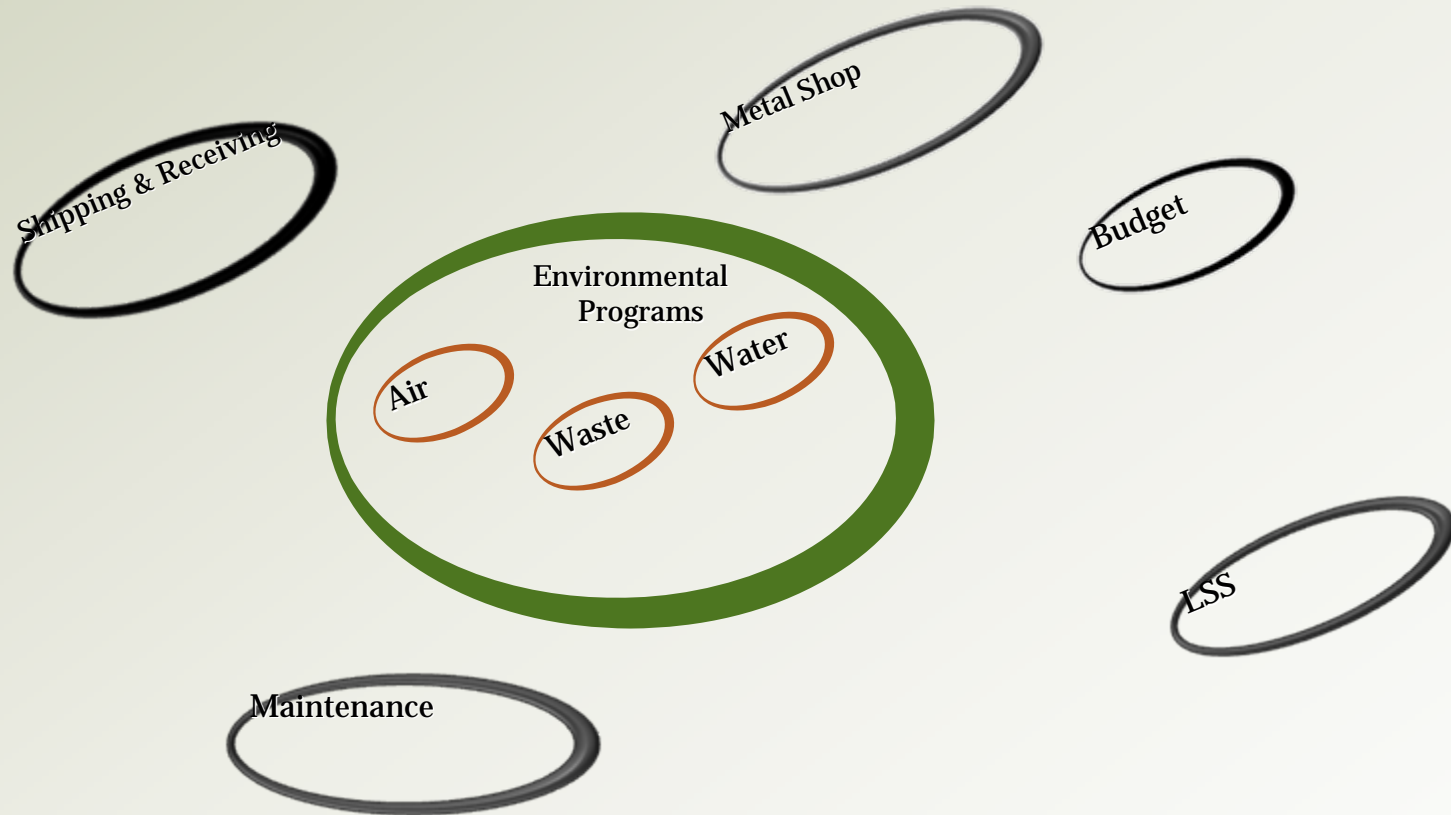
- ❑ Carbon Emission Reduction Standards
- ❑ New Material and Chemical Policies
- ❑ Environmental and Social Sustainability
- ❑ Higher Deployments within the DoD
- ❑ Demand for Renewable Energy
- ❑ New ISO Standards
- ❑ Huh? What's an ISO Standard? What's LSS?
- ❑ Demand to Incorporate New Technology
- ❑ And on, and on, and on...

The New Breed

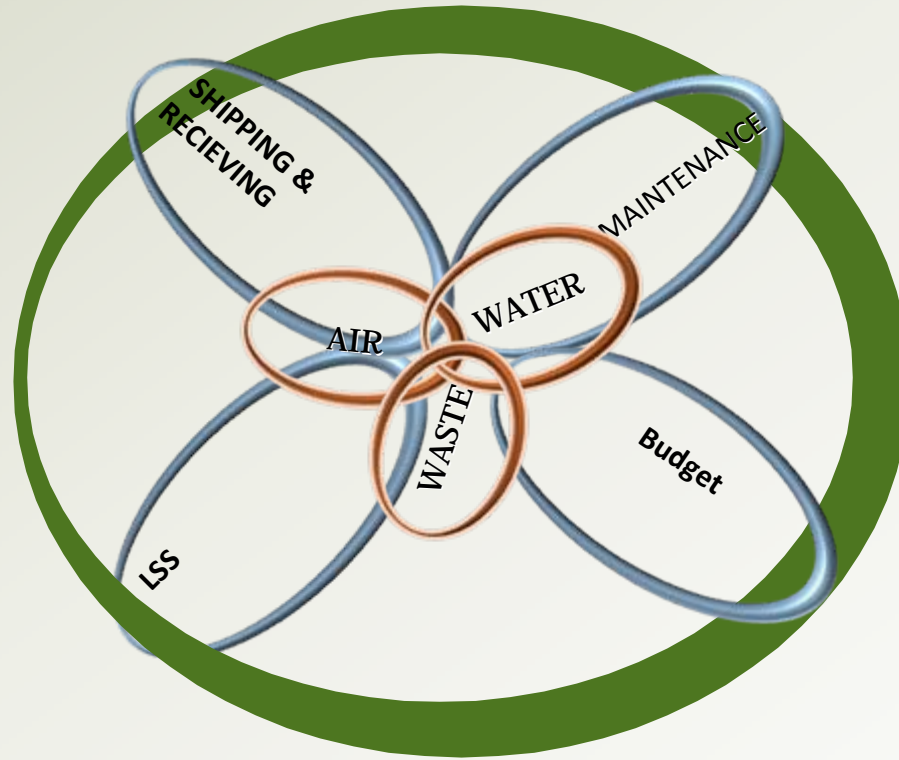


- ❑ Solid grounding in environmental, health and safety requirements, processes, procedures, technologies at local, state, federal, regional and international levels
- ❑ Has knowledge of how product financing and corporate finance intersect with sustainability
- ❑ Has a far more strategic role and interacts directly with top leadership
- ❑ Acts as the central “change agent” and catalyst to drive employee engagement


Old philosophy was that effective environmental management involved the implementation of programs to meet regulatory requirements and helped an organization avoid negative consequences.



The new philosophy is effective environmental management, using EMS can help support mission accomplishment and sustainability, while integrating goals throughout the entire company culture



*Maturity of Process

Principles and Practices of an organization				
		EARLY	INTERMEDIATE	FULL ENGAGEMENT
Inclusiveness (Plan)	Stakeholder Engagement	Weak feedback	Some dialogue with intermediate shareholders.	Strong and continued engagement of all relevant stakeholders.
	Issue Identification	Restricted and isolated engagement and issue identification.	Current issues identified.	Issues clearly and regularly reviews, with feedback mechanisms in place.
Approach (Do)	Key Drivers	Quarterly return and regulatory driven.	Sustainable development is now a part of risk management	Short, long and broader view fully integrated with proactive planning.
	Leadership and Vision	Directive orientated adherence to regulations.	Leadership commitment with policy and objectives.	Purpose, vision and values integrated Prevention rather than cure.
	Managing Risk	Firefighting Compliance by the book.	Main risks identified and managed. Performance indicators but divorced from sustainability.	Sustainable initiatives fully integrated.
Stewardship (Act)	Culture	Minimalistic, doing as little as possible.	Meeting regulatory or DoD baseline requirements.	Culture of sustainable development embedded at and across all levels for planning and decision making.
	Supply chain issues	Supplier ranked on technical compliance, cost and delivery.	Broadened criteria to include environmental and safety.	Community of allied interests is fully recognized.
Assessment (Checking)	Review	Conventional systems in place, meets requirements.	Integrated system designed with planned distribution.	Periodic review and corrective actions address all necessary recipients.
	Reporting	As required *Adapted from BS 8900 – Guidance for Managing Sustainable Development	Selective to determined ends.	Legitimate stakeholders (internal and External) receiving regular and appropriate reporting

