PHD DISSERTATION DEFENSE

IMPROVING THE USEFULNESS OF ENVIRONMENTAL INFORMATION FOR DECISION MAKING IN ORGANIZATIONS

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ABSTRACT Increasingly we observe organizations actively engaging in environmentally friendly and sustainable practices, and trying to demonstrate this as a priority through external reporting and voluntary disclosure. Outputs of research in the environmental and sustainability sciences are necessary to inform decision making within organizations, yet the tools and communication strategies produced by this scientific community have been criticized for their lack of practicability and usefulness. This problem highlights a disconnect between the generation of environmental knowledge and the application of that knowledge in the decision-making process. Many questions remain about the mechanisms that create these knowledge transfer barriers and the avenues that should be explored to find solutions. This work analyzes three different case studies where environmental information has been criticized for its limited usefulness. The theoretical background and research methodologies used throughout the chapters draw from several disciplines across both the natural and social sciences: industrial ecology, life cycle assessment, organizational science, management science, communication studies, and behavioral psychology.

BIO Prior to joining Bren, Jess earned a BS and MS in Environmental Engineering & Water Resources from Tufts University. She then spent two years in the Environmental Footprint Reductions group at The Dow Chemical Company, where she focused on by-product synergy, waste reduction strategies, green infrastructure initiatives, and company-wide environmental targets. During her PhD, Jess has been an active member of the Chemical Life Cycle Collaborative (CLICC), an EPA-funded project focused on developing a web-based, rapid-response tool to fill in life cycle assessment (LCA) data gaps for chemicals. While working towards her PhD at Bren, Jess also completed a Masters in Technology Management (MTM) at UCSB and spent two summers working in Apple’s Environmental Technologies group, where she primarily focused on LCA. Upon graduation, Jess will join Apeel Sciences as the Director of Sustainability.