

Research Area 7-1. Technology Implementation/Commercialization Support.	
Statement of Need	Science and technology research and development often does a poor job of moving innovative ideas and technologies to commercialization. Approaches to accelerate commercialization are needed.
Research Objective	Develop a Technology Transfer/Commercialization organization to support and accelerate technology implementation.
Impact/Benefits	Efforts to move technologies through the "valley of death" with small investments can significantly improve acceptance of new technologies and show significant savings and economic impacts.
Priority	High
Summary Scope of Work	Develop an organization to act as a Technology Transfer Group to develop approaches to accelerate technology implementation and commercialization.
Technical Approach	Approaches should enable integration of venture capital with emerging technologies, handle IP, connect vendors/developers with capital, provide business support with technical support.
Lead Investigators (academia, natl. lab, industry, international, partnership)	DOE-associated group
Potential Collaborative Govt. Agencies	Commerce Department
Leverage Opportunities with Existing Programs	DOE has worked with contractors to develop technology transfer organizations within the contractors, such as TUC. This model should be used to help accelerate commercialization of new technologies.
Constraints/Challenges (Policy, regulatory, technical, sequencing?)	Implementation support requires business expertise rather than as much technical expertise, and therefore is a different capability than commonly available in DOE.
Estimated Cost	??
Execution Horizon (early, mid, late)	Out 2-3 years to develop, but should become long-term activity for DOE.
Schedule/Duration	Starts in 2-3 years but extends for life of program.
Level of Development/Level of Maturity at completion	Technology Commercialization/Transfer organization in place to accelerate water efficiency and energy efficiency technology implementation.
Additional comments	

Research Area 7-2. Predictable, stable, science-based regulatory environment	
Statement of Need	Develop a predictable, stable regulatory environment that is science based and adheres to a standard regulations development process to establish permit requirements.
Research Objective	Establish a standing technical review committee that will evaluate proposed institutional requirements (policies, regulations, standards, regulatory and permits) to provide a peer reviewed science based validation. Socio-economic analyses will be an essential part of these assessments.
Impact/Benefits	Provide a predictable environment of permit requirements enabling industry to plan long term development.
Priority	Highest
Summary Scope of Work	Establish a technical committee of scientists, policy analysts and engineers, knowledgeable of energy / water development and institutional requirements affecting them on State and Federal levels. Additionally, socio-economic analyses are essential.
Technical Approach	Provide quick turnaround review and analysis of developing and proposed changes to institutional requirements, and to provide "expert" testimony as necessary.
Lead Investigators (academia, natl. lab, industry, international, partnership)	National Labs
Potential Collaborative Govt. Agencies	
Leverage Opportunities with Existing Programs	All applicable sources of peer reviewed literature and professional expertise.
Constraints/Challenges (Policy, regulatory, technical, sequencing?)	Funding available.
Estimated Cost	
Execution Horizon (early, mid, late)	Early
Schedule/Duration	Ongoing
Level of Development/Level of Maturity at completion	Mature from the onset.
Additional comments	