

## **Re-Branding the Nuclear Fuel Cycle**

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## ABSTRACT

One of the key challenges for the future expansion of nuclear power in the US is the current lack of a strategy for the long-term management of our commercially-used nuclear fuel. For nuclear energy to continue being a substantial contributor to the U.S. energy mix, the nuclear industry should develop and demonstrate a viable option for the nuclear fuel cycle that enables the safe, secure, economic, and sustainable expansion of nuclear energy while minimizing proliferation and terrorism risks. Given the political challenges facing the nuclear fuel cycle, it is crucial that sound technical and technological solutions be developed to secure the understanding and the support of the relevant stakeholders for these solutions.

At the same time, the nuclear community is well aware of the fact that for a Nuclear Fuel Cycle strategy to be successful, it not only needs to be technically sound but it also needs to satisfy the wishes and concerns of all relevant stakeholders. This project will provide the nuclear community with a much needed public perception reality check regarding the various options that should be explored from a technical point of view in order to obtain a sustainable nuclear fuel cycle. This work will create a comprehensive framework for the evaluation of alternative fuel cycle systems, as well as a proposal for a successful long-term strategy for the creation of a brand for the nuclear fuel cycle.

The central objective of this work is to identify and analyze key elements inherent in the various approaches proposed for a sustainable US nuclear fuel cycle, devise an effective communications strategy to reach the appropriate stakeholders, facilitate stakeholders' understanding of the relevant issues, and provide feedback to program officers with regards to the stakeholders' concerns and desires. In short, this project aims to design a successful strategy to re-brand the nuclear fuel cycle into a familiar and low-risk concept whose contribution to people's everyday life is perceived as positive.

This scope of work will be accomplished with the involvement of faculty and students with very diverse backgrounds from two universities. The cross-pollination between faculty and students in nuclear engineering, business, marketing, mass communications, advertising and art will promote a very creative environment in which innovation and alternative points of view will thrive.