

US EPA ARCHIVE DOCUMENT

Building a National Laboratory for Innovation



With experiments now underway, we are carefully watching the results. This is an important step if we are to progress toward our ultimate goal—scaling up successful concepts and approaches for broader application. We know that in order for these experiments to realize their true potential, we must use what we learn to make improvements in our national programs. In some cases, existing policies and regulations may have to be adapted to reflect more up-to-date knowledge and technology.

As highlighted in “Learning From Experiments,” some innovations are already being adopted into our system of environmental protection for everyone’s benefit. Some innovations are still emerging, yet throughout the process for developing these experiments, even projects that are very early in the implementation stages have highlighted opportunities for EPA to adopt fresh, transformational strategies for achieving cleaner, cheaper and smarter solutions to environmental problems.

Learning From Existing Projects

Throughout the experimentation process, EPA remains committed to the basic principles of Project XL. Some projects last for several years, so EPA will remain engaged with project sponsors to track the evolution of innovations and gauge the actual environmental performance against expected outcomes. Experiments must show superior environmental performance and meaningful involvement of interested parties and they must be transferable to other facilities, processes or technologies. Early Project XL results indicate that we can create better environmental outcomes when all affected parties work together toward a common goal.

Today, as an organization EPA faces new phases of the Project XL challenge: As the information on project results expands exponentially, what are the best methods for transforming results into knowledge? As we evaluate and learn how these new tools work, how do we match the right tools to the right problems? How do we increase our rate and scale of adopting new ideas into appropriate system-wide practice? How do we translate our innovation experience into improved processes that will enhance our ability to test new concepts?

In theory, the innovation process in an organization can be divided into two broad activities—incubation and implementation²². Incubation is defined as collecting information, conceptualizing, and planning for the innovation’s testing, all leading up to the decision to adopt. During the incubation phase, the organization must recognize the need for innovations and have a matching willingness to experiment. For Project XL, incubation includes the steps leading up to the signing of the final project agreement (FPA). The decision to test a Project XL innovation separates the incubation phase from the implementation phase. Implementation consists of all the events, actions, and decisions leading to the adoption of an innovation. In the implementation phase, the organization must produce results to verify the innovation’s potential, clarify results as the innovation is put into more widespread use, and routinize the innovation into its regular activities. The innovation process is complete when the innovation becomes a routine part of the organization’s business process and environmental protection system.

EPA plans to explore the application of this theory of the innovation process, as well as related theories and processes in an effort to continue building our system of innovation for Project XL. This important phase of Project XL coincides with a Agency-wide effort to learn from this and other innovation efforts how to best infuse the regulatory climate with processes that will address constantly changing conditions—environmental, technical, socioeconomic, and political—through new, creative solutions.

A Laboratory of Innovation

As a vehicle for testing new ideas in environmental protection, Project XL is unprecedented. Predictably for an experimental program, it has not been without some conflict and controversy. But it also has yielded important discoveries and insights about ways to improve environmental results. Of

the many lessons EPA has learned from this unique program, some of the most important are:

- It is possible to experiment with new approaches outside the traditional regulatory system as long as strong, reliable safeguards are in place.
- Some businesses and communities are not only willing, but eager, to take greater responsibility for environmental results if they are given flexibility in meeting the goals.
- If given an opportunity, citizens and other stakeholders can play an active, creative role in finding solutions to problems.
- The opportunities to improve become more visible, and the results potentially more significant, when you step back and look at communities or facilities as a whole, rather than as a set of separate, unrelated components.

Although we have substantial number of experiments underway, EPA’s need to test new tools and new solutions will not end. Our stakeholders will continue to have innovative ideas for achieving cleaner, cheaper, and smarter environmental protection and EPA is committed to providing a vehicle for testing and implementing those concepts. This next phase will reflect the Agency-wide commitment to adopt and implement innovative ideas on a larger scale. EPA’s goal is to provide even stronger incentives for good performance and going beyond compliance by developing new programs and approaches, such as the National Environmental Performance Track program launched on June 26, 2000. Lessons learned in Project XL will continue to be integral to developing these high performance alternatives.

We believe that the type of experimentation allowed under Project XL is fundamental to continued advances in environmental protection. Indeed, we believe that sustaining our strong national legacy of environmental progress depends on innovation—at EPA, in state environmental programs, in local governments, in businesses, in communities—in all parts of our society. That is why EPA launched Project XL, and it is why we will continue support-

²² Everett M. Rogers. *Diffusion of Innovations*, 4th Edition, New York: The Free Press, 1995.

ing and encouraging the search to diversify our environmental protection tools, identify new approaches, learn about the keys to their effective use, and match the right tools to the right problems.

The future will undoubtedly raise new challenging issues, but we are better prepared than ever to respond. With the results of the full array of projects at hand, along with the results from the Agency's other innovative efforts, the greatest challenge will be selecting among all the available options to design the most effective response to existing and emerging environmental problems. In some cases, existing laws and regulations will continue to be the best way to reduce risk. But better results at lower costs may be realized by applying tailored strategies that involve pollution prevention, maximizing the use of new technology, site specific re-investment, new reporting alternatives, livability and smart growth strategies, and other incentives. Through Project XL and EPA's other innovative efforts we will meet the challenges of tomorrow by finding, testing and adopting cleaner, cheaper and smarter environmental management strategies today. ❁

