Deloitte.

THE RIPPLE EFFECT

Stories of purpose and lasting impact

A drop in one bucket can be transformative in another.

A vision to expand the energy landscape and spark economic growth where it's needed



THEY HAVE SUN, WATER, WIND, AND STORAGE—AND A POWERFUL OPPORTUNITY.

THE SITUATION

It's about perspective. A single drop falling into an industrial-size vessel might escape notice altogether. Yet, in a smaller container, that very same drop could make all the difference. Now, imagine that "drop" represents a \$1 billion grant and the impact those funds can have on a small, underserved community. It could be transformative.

That's what motivated one visionary team aiming to transform the hydrogen landscape in the United States. Green hydrogen energy production, at scale, requires sun, water, wind, and storage; and the Gulf of Mexico is among the world's largest regions for salt domes, which are well-suited to hold large amounts of hydrogen. This private equity-funded startup intended to establish a clean hydrogen hub away from more established energy centers, in a Gulf Coast community where economic growth from such a hub could be more impactful.

The team was leveraging its significant commercial experience and capabilities to bring a commercial project online when opportunity emerged: a federal grant program to support the creation of 6–10 regional clean hydrogen hubs across America. The CEO believed these federal funds could have a profound impact on the operation and the surrounding community, which may not have had similar opportunities. A \$1 billion grant could help drive economic transformation and support an equitable energy transition and resilience. The decision to apply was simple.

The application, however, became complex. It required bandwidth—and time—the small team couldn't provide, along with hundreds of pages of application materials and supporting ideas. The team realized it couldn't tackle this challenge alone. The stakes were too high.



THE SOLVE

The client's call for help reached a specialist in Deloitte's hydrogen practice, who jumped at the opportunity. "Building this new energy landscape is a very interdisciplinary problem," he noted, and given the scope of the application, there were few—if any—organizations with the capabilities to address its many varied elements as Deloitte could.

Within days, a Deloitte team assembled, and it was indeed interdisciplinary. It included former nuclear, chemical, and mechanical engineers; financial analysts; specialists with extensive knowledge of private equity; and a community benefits specialist who happened to have a PhD in orchestra conducting. They shared an understanding of how this grant could transform disadvantaged communities. That fueled them to meet the deadline—just six weeks away—and work began in earnest.

While some professionals worked offsite, pulling in different parts of Deloitte as needed, others traveled to the client's location. This in-person collaboration helped build mutual trust and enabled scope decisions to be made collectively.

The Deloitte team collaborated with the client to decompose the application into increasingly smaller tasks. Areas of focus included financial, project planning, staffing, community benefits, project management, grant administration, risk management, cybersecurity, and environmental impacts—along with a dozen more. The community benefits plan is a recent addition to grant applications such as this and required environmental justice analysis and an estimation of impacts on the region.

Deloitte helped build required components, such as an integrated multiyear project plan, a risk register, foreign entity waivers, and a cybersecurity framework. Then, leveraging those same interdisciplinary skills, Deloitte professionals helped put the pieces together so the application could be formally submitted. And the client gained new tools it could utilize well beyond the single application process.

A PLAN FOR LOWERING CARBON AND UPLIFTING COMMUNITIES

THE IMPACT

Out of more than 80 applicants at the start of the process, the client was down selected to a group of 33 by the Department of Energy (DOE), but was not one of the 6-8 hubs funded for this particular grant. The client team did not let this setback break their resolve. Deloitte's work with the client resulted in new learnings, new tools, and extensive materials that its team can use to gain new collaborators and debt funding.

Tools Deloitte helped the client build and/or access include:

- An integrated multiyear project plan and corresponding budgets.
- A comprehensive financial model that can be adapted for other applications.
- A model for assessing carbon emissions impact reduction.
- A DOE emissions impact model, typically the purview of environmental engineers and scientists.
- A risk register and holistic risk management plan.
- A framework—and overall compliance plan—for cybersecurity.
- Staffing plans.
- A robust community benefits plan.

Before engaging Deloitte, the client worked for several years to gain the land access for the regional clean hydrogen hub. Now, in addition to a bold vision for the Gulf Coast region and its salt domes, the client has a pathway, budget, and plan for it to become a reality.

TRANSFORM THE ENERGY LANDSCAPE. ENERGIZE LOCAL ECONOMIES.



LET'S CONNECT.

Do these challenges sound familiar?



GEOFF TUFF US Hydrogen Practice Leader Principal Deloitte Consulting LLP gtuff@deloitte.com +1 617 437 3863



ALEX FLEMING

Senior Manager Deloitte Consulting LLP alfleming@deloitte.com +1 480 262 3782

Deloitte.

About this publication

This publication contains general information only and Deloitte is not, by means of this publication, rendering accounting, business, financial, investment, legal, tax, or other professional advice or services. This publication is not a substitute for such professional advice or services, nor should it be used as a basis for any decision or action that may affect your business. Before making any action that may affect your business, you should consult a qualified professional adviser. Deloitte shall not be responsible for any loss sustained by any person who relies on this publication.

About Deloitte

As used in this document, "Deloitte" meansDeloitte & Touche LLP, which provides audit, assurance, and risk and financial advisory services; Deloitte Consulting LLP, which provides strategy, operations, technology, systems, outsourcing and human capital consulting services; and Deloitte Financial Advisory Services LLP, which provides forensic, dispute, and other consulting services; and its affiliate, Deloitte Transactions and Business Analytics LLP, which provides a wide range of advisory and analytics services. These entities are separate subsidiaries of Deloitte LLP. Please see www.deloitte.com/us/aboutfor a detailed description of our legal structure. Certain services may not be available to attest clients under the rules and regulations of public accounting.

Copyright © 2023 Deloitte Development LLC. All rights reserved.

Member of Deloitte Touche Tohmatsu Limited