Engineering Innovation Campus: Building the Future of Sustainable Technology in the Seacoast Region of New Hampshire.

Background:

The story of the **Engineering Innovation Center** in New Hampshire, begins with a transformative vision for sustainable infrastructure and economic revitalization. Originally conceived as the **Green Data Facility**, the project was designed to address the urgent need for environmentally sustainable data center solutions while leveraging the repurposing of a 625,000-square-foot manufacturing building. This brownfield site presented challenges, including existing environmental code violations and hazardous waste, which became an opportunity for innovative remediation and redevelopment.

Vision and Expansion

Initially, the Green Data Facility aimed to create a cutting-edge hub for data storage and computing, utilizing renewable energy sources, water conservation technologies, and energy-efficient designs. However, as the project unfolded, it became clear that the site's potential extended far beyond its original scope. By September 2024, the concept had evolved into an expansive vision for an **Engineering Innovation Center**, a hub for entrepreneurship, research, and development.

The expanded mission was inspired by two key drivers:

1. **Economic Development and Community Impact:** Recognizing the potential for job creation and economic revitalization, the project pivoted to address broader needs. With a focus on hiring 10% of the local population over the next decade, the center aims to upskill the workforce and attract top engineering and technology talent.
2. **Replicability:** Early discussions made it clear the proposed site included many uncontrollable risks while the idea refined to the base mission would fill an identified gap in resources for entrepreneurs and graduates in engineering fields. This led to the vision of a space where ideas could flourish through partnerships with universities and the private sector in secondary and tertiary markets.

The Concept of the Innovation Center

The **Engineering Innovation Center** plans to serve as a launchpad for startups, innovators, and researchers, particularly in emerging fields like, artificial intelligence (AI), machine learning (ML), and data center engineering. By providing a collaborative environment, including residencies modeled after medical training programs, the center fosters a unique synergy between academic rigor and practical industry application.

Stakeholder Collaboration and Milestones

The project gained momentum through collaboration with stakeholders such as the **Business Development Coordinator**, the **Small Business Development Center**, and **Management Consultancy firm MOHBILITY** - ran by project co-founder **Mr. Mohammed K. Bility** - which helped assemble a qualified C-suite and Board of Advisors. A four phase development strategy was adopted to begin operations within six months of the final phase.

Key milestones included:

- Structuring the governance
- Forming equity structures designed to attract investors, including milestone-based equity grants for key contributors.
- Addressing state interest regarding job creation and identifying sites in Economic Revitalization Zones, which established the project as a cornerstone of economic redevelopment efforts.

Current Position and Future Outlook

As of late 2024, the Engineering Innovation Center is positioned to become a regional leader in fostering sustainable engineering solutions and cutting-edge technology development. The project aligns with the IEEE's vision of advancing technology for humanity, as it combines sustainable practices with engineering innovation.

The Center represents not just a building but a holistic ecosystem, merging technological advancement, and community development. Its transformative journey—from a green data facility to a beacon of innovation—illustrates the power of adaptive vision and stakeholder collaboration in creating impactful, future-forward infrastructure.

This project emerged from a vision to create a space where innovation thrives, sustainability is prioritized, and opportunities for entrepreneurship abound. While initially considering a brownfield redevelopment approach, the project pivoted to a greenfield site in the Seacoast region of New Hampshire. This decision allows for full design flexibility to optimize energy efficiency, integrate renewable power sources, and incorporate the latest sustainable technologies from the ground up.

This narrative serves as an inspirational model for how sustainability, economic growth, and engineering excellence can come together to shape the future.

Future State:

The Engineering Innovation Campus in New Hampshire is reimagining how we approach sustainability, innovation, and entrepreneurship in the modern engineering landscape. As a new greenfield development, this state-of-the-art project will serve as a hub for advanced technologies, focusing on high-impact fields such as artificial intelligence (AI), machine learning (ML), commercialization, clean tech, and data center engineering.

Current Progress and Next Steps

The project team is actively collaborating with a commercial real estate firm to finalize the selection of an ideal site within the Seacoast, ensuring that the location aligns with both operational and ecological goals. The commercial real estate firm's extensive expertise and database are being leveraged to secure a site that provides the infrastructure and scalability needed to achieve the ambitious vision of this campus.

Upon completion, the Engineering Innovation Campus will include a Tier III sustainable data center, serving as a regional power grid asset while meeting the cloud storage and high-performance computing needs of modern enterprises. The facility will also feature cutting-edge labs and collaborative spaces to foster innovation among startups, researchers, and established businesses.

The next critical steps include:

- Finalizing site selection and securing necessary permits.
- Beginning construction design phase with a phased build-out approach, enabling portions of the campus to become operational within six months post-construction.
- Launching residency programs for engineers and entrepreneurs to cultivate talent and drive innovation.

Economic and Social Impact

The Engineering Innovation Campus is more than a technological hub; it is an economic catalyst for the Seacoast and the surrounding regions. During construction, the project will create over 200 jobs, including roles for skilled labor and project management. Once operational, the facility will support approximately 50 full-time positions, ranging from data center technicians to IT support staff, security, and administrative roles.

By collaborating with universities, local businesses, and international organizations, the campus will also provide upskilling opportunities for the local workforce, aligning with long-term

community development goals. Entrepreneurs and startups will benefit from access to mentorship, funding resources, and state-of-the-art facilities to accelerate their growth.

At its heart, the campus is committed to sustainability. The greenfield approach enables the integration of renewable energy sources, advanced cooling systems, and eco-friendly building materials, ensuring minimal environmental impact. The campus will also support on-site power generation, providing energy resilience and reducing reliance on traditional grid systems.

The Engineering Innovation Campus aspires to become a global leader in sustainable technology and innovation. Beyond the immediate operational goals, the project will scale to include additional facilities, labs, and collaborative spaces. Its residency programs for engineers and entrepreneurs are modeled after medical residencies, offering mentorship and hands-on experience to nurture the next generation of innovators.

The Engineering Innovation Campus in Seacoast, NH region, represents a bold step forward in sustainable technology and economic development. By connecting industry leaders, researchers, and entrepreneurs, it is poised to make a lasting impact on the global engineering landscape. We invite stakeholders to engage with us—whether through partnerships, referrals, or direct involvement in this transformative initiative.

The future of sustainable engineering begins here. Together, we can create the blueprint for tomorrow.