

Renewed Hope for an Essential Industry in 2022

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A wise person once told me, construction and engineering go hand-in-hand. When construction is thriving, engineering slows down, and vice versa.

This may hold true under normal circumstances, but the past two years have been anything but normal. With so many uncertainties still ahead, the one constant through it all has been the job market in the construction and engineering industries.

Designated as an essential industry during the pandemic, both sectors, for the most part, have seen a rise in its workload. This trend is expected to conMany engineering firms and government agencies are already seeing and feeling the effects of a depleted pool of engineers to fill the vacancies in the workforce.



RHA Energy Partners LLC won the Grand Conceptor Award in the 2021 ACECH Awards contest for its work on Punahou School's Path to Net Zero project.

PHOTO COURTESY ACECH

tinue through 2022. However, we need to remain vigilant, as funding shortfalls and delays in manufacturing and material delivery continue to pose new challenges in the years ahead.

Locally, state and counties continue to invest into our economy by budgeting millions in capital improvements projects to address critical public infrastructure and affordable housing needs. These projects are vital in reviving our economy as we continue to navigate through the pandemic.

Perhaps the biggest news, both locally and nationally, is the passage of the Infrastructure Investment and Jobs Act (IIJA) in November 2021. The execution and

implementation of this once-in-a-generation investment will take time, but it should ease economic pressures and help sustain engineering and construction workforce for years to come.

What this means for Hawaii's communities is at least \$2.8 billion in federal aid and grants to address public infrastructure needs, including transportation (highways, bridges, airports, public transit and electric vehicles), broadband internet access across the state, upgrades to the water and wastewater infrastructure and cesspool compliance.

Something that shouldn't be overlooked is climate change. Climate change is one of those anomalies that is easy to neglect since the impacts are decades away and engineering and funding challenges are unprecedented.

We have seen the devastating effects of flooding and coastal erosion and learned how increasing levels of carbon pollution emissions in the atmosphere contribute to these unstable conditions. While the IIJA touches on major sources of greenhouse gas emissions, it doesn't fully address the impacts this could have in the distant future.

In Hawaii, we are already seeing the impacts of sea level rise and other natural hazards that disrupt our daily lives. Efforts to mitigate the long-term impacts of climate change are being done at the state and county levels, and progress is being made. Government agencies are doing their part by taking a serious look at sea level rise, energy conservation, renewable energy and sustainable resources. It is just a matter of time before these initiatives and planning documents turn into projects for our industries.

As we peek into the future, at least for the next few years, our job market should continue to climb. However, there is a dark cloud looming, and that is the labor shortage. Many engineering firms and government agencies are already seeing and feeling the effects of a depleted pool of engineers to fill the vacancies in the workforce.

With no near-term solution in sight, focus has turned to industry-led sector partnership programs with the Chamber of Commerce and University of Hawaii's College of Engineering to connect educators with industry leaders to foster cross-sector dialogue on how to build and strengthen the engineering workforce for future generations. Support these efforts by getting involved.

For almost 60 years, ACECH has been at the forefront to protect the overall health of the engineering, construction, and construction management industries in Hawaii (for information: acechawaii.org).