

## **REBUILDING BETTER AND STRONGER!**

## SUSTAIN OR EXPLAIN

By Melissa Peneycad, ISI Managing Director

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If COVID-19 has taught us anything it is that our health and safety are tied directly to our natural world—and when nature is out of balance our well-being suffers greatly.

Witnessing this unfold in real-time, many publicsector agencies and their private-sector partners in the Architecture, Engineering, and Construction (AEC) industry are calling for a change in the way projects are planned, designed, and built moving forward. They are aware that modernizing infrastructure, revitalizing, and expanding parks, and investing in transit, renewable energy projects, and the like, will create good-paying, high quality jobs and, in turn, transform economies, protect the environment, and enhance societal health.





During this critical time, building infrastructure will be a top priority to bolster economies and get people back to work. Thankfully, growing factions in both the US and Canada are calling for a green recovery approach that focuses on delivering lower carbon and more equitable societies. Unlike previous recovery efforts, such as the Depression-era New Deal, we now have the tools and frameworks to deliver improved solutions, which means we can truly learn from the past and make wiser long-term choices.

Right now, though, uncertainty is rampant, forcing organizations to respond and adapt quickly. If we are not careful, we could easily overlook sustainability. At this critical juncture, we cannot afford to let that happen.

To prepare for unknown or looming threats, like pandemics or potential health crises, we must bake sustainability and resiliency into our processes and methods from the get-go.

Planning, designing, and building shovelworthy projects, not just shovel-ready ones, will allow us to reimagine and rebuild stronger, better communities. To that end, the Institute for Sustainable Infrastructure (ISI) is hopeful that more public agencies and private AEC firms turn to the Envision sustainability framework and rating system to drive sustainable and resilient projects forward.

Since its inception ten years ago, Envision has helped hundreds of project teams worldwide deliver future-forward infrastructure projects. Using Envision, project teams work collaboratively to navigate the complexities of sustainability, creating solutions that result in positive, conserving, or even restorative outcomes. Envision recognizes the irrefutable link between the natural world and our health. It encourages project teams to consider protecting and preserving farmland, undeveloped land, and areas with high ecological value. Important conservation measures like reclaiming brownfields and protecting or restoring habitats are encouraged as well. And there's an emphasis on restoring degraded natural systems.

The Envision framework also encourages project teams to examine how they might deliver several benefits to the communities they serve. Consider some of the following examples: the <u>Westside</u> <u>Subway Extension</u> in Los Angeles, California; the <u>OC Streetcar</u> in Orange County, California; and the <u>Boston Landing Station</u> in Massachusetts. Each created thousands of direct and indirect jobs, took cars off congested roads, lowered GHG emissions, and provided convenient and safe transportation options for residents and visitors alike. Both the <u>AlexRenew Nutrient Management Facility</u> in Alexandria, Virginia, and the <u>Grand Bend</u> <u>Wastewater Facility</u> in Lambton Shores, Ontario, reimagined their relationships with the communities they serve and began treating wastewater and providing recreational and educational opportunities to residents.

In addition to those benefits, Envision recognizes and rewards genuine innovation in infrastructure that leads to healthier, more sustainable communities. For example, the <u>Surrey Biofuel</u> <u>Facility</u> in Surrey, British Columbia, was the first closed-loop fully integrated organic waste-toenergy infrastructure facility in North America. It processes residential and commercial organic waste into renewable natural gas—enough to fuel the city's natural-gas fueled fleet to achieve ambitious waste-diversion targets and reduce air pollution and greenhouse gas emissions.



OC Streetcar Project, Orange County, CA — Envision Silver, 2019

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When it comes to designing and building infrastructure, there are many considerations that need to be made, including investing in long-lived projects. The highways, bridges, power stations, and wastewater treatment plants we build today have design lives ranging from 20 to 75-plus years. That means, the civil infrastructure we build today will establish the energy, water and materials efficiencies, and ecosystem impacts for decades to come. Therefore, whatever we build today needs to shape a better tomorrow.

We have to look at the design and build methods of the past and rethink how we rebuild. That takes strong leadership and good collaboration. Without a doubt, COVID-19 has highlighted the need for solid leadership, commitment, and coordination at all levels of government and among public and private organizations. This isn't easy to do. It requires breaking down silos, working better in teams, and communicating in different ways, including digitally. One of the great things about Envision is that it addresses explicitly that kind of leadership, collaboration, teamwork, and holistic thinking required to plan, design, and deliver sustainable and resilient infrastructure. It also reinforces lifecycle decision-making and the adoption of sound economic approaches in the evaluation of projects. It is a well-rounded, flexible, and adaptable framework that encourages the exploration and pursuit of sustainability from all sides.

Despite those advantages, though, many people —even some in the AEC industry—have never heard of the Envision sustainability framework and rating system.

Imagine if they did. Imagine if all projects were planned and designed using Envision to deliver sustainable and resilient transportation, water, and energy systems. The positive outcomes that could be achieved are exciting to contemplate.



AlexRenew Nutrient Management Facility in Alexandria, Virginia

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No matter what happens, rest assured knowing that ISI remains committed to helping individuals, public agencies, and private organizations adopt and implement sustainable and resilient methodologies. We will also work closely with partners and members to ensure that stimulus dollars are spent wisely.

This moment in time has far-reaching implications for our industry—it's a crucial time for us to 'sustain it or explain it.' If we succeed, future generations will look upon this crisis and realize that the AEC industry rose to the occasion and did its part to **Envision a more sustainable world.**  To learn more about the Envision sustainability framework and rating system, become credentialed as an Envision Sustainability Professional (ENV SP), have projects verified for sustainability, or become an ISI member, please visit our website:

www.sustainableinfrastructure.org

Cedar River Flood Control System, Cedar Rapids, IA- Envision Verified, 2017

