



Introducing **ENVISION**

Date | Presenter Name



Institute for
Sustainable
Infrastructure

Institute for Sustainable Infrastructure (ISI)

Education and research nonprofit (501c3) based in Washington, D.C.

Founded in 2010 by ACEC, APWA, and ASCE



Collaborated with the then **Zofnass Program for Sustainable Infrastructure at the Harvard Graduate School of Design** to develop and manage a sustainability rating system for infrastructure



The first version of the **Envision framework** and rating system was introduced in 2012



Getting Infrastructure Right

A GENERATIONAL OPPORTUNITY



Infrastructure provides **the building blocks on which communities depend**, but historic underfunding led to significant infrastructure gaps.



Public agencies and the A/E/C community are tasked with the **timely renewal of infrastructure**.



Too often infrastructure development was also environmentally **costly and not aligned with community needs**.



Their work is supported by policies like the **Infrastructure Investment and Jobs Act** and the **Inflation Reduction Act** that have transformed the industry.

DID YOU KNOW?

Many of those same companies and agencies **are also ISI organization members**

ISI is the Hub of a Unique Community



ISI Programs

ISI provides tools, resources, and roadmaps for civil infrastructure projects to be more sustainable, resilient, and equitable.



MEMBERSHIP

A network of industry experts leading the charge for sustainable infrastructure



CREDENTIALING

Training and certification on the knowledge and application of the Envision framework



VERIFICATION

Third-party evaluation of project sustainability performance against the Envision criteria



RESEARCH

In 2022, ISI brought the Zofnass program over from Harvard to support research related to advancing sustainable infrastructure



Introducing Envision

Envision is a blueprint for fundamental change in infrastructure development.

- Enables a **thorough examination** of the sustainability and resiliency of infrastructure projects
- Provides **practical guidance** on how to improve performance
- Drives **better project management**

Components of the Envision Framework



GUIDANCE MANUAL

The primary reference document of the Envision sustainability framework.



PROJECT SELF- ASSESSMENT TOOL

Rate a project's sustainability components against the framework's criteria.



PROFESSIONAL TRAINING & CREDENTIALING

Be recognized in the industry for your sustainability knowledge and skills.



PROJECT VERIFICATION & AWARDS / RECOGNITION

Based on % of applicable points achieved



Verified
20-29%



Silver
30-39%

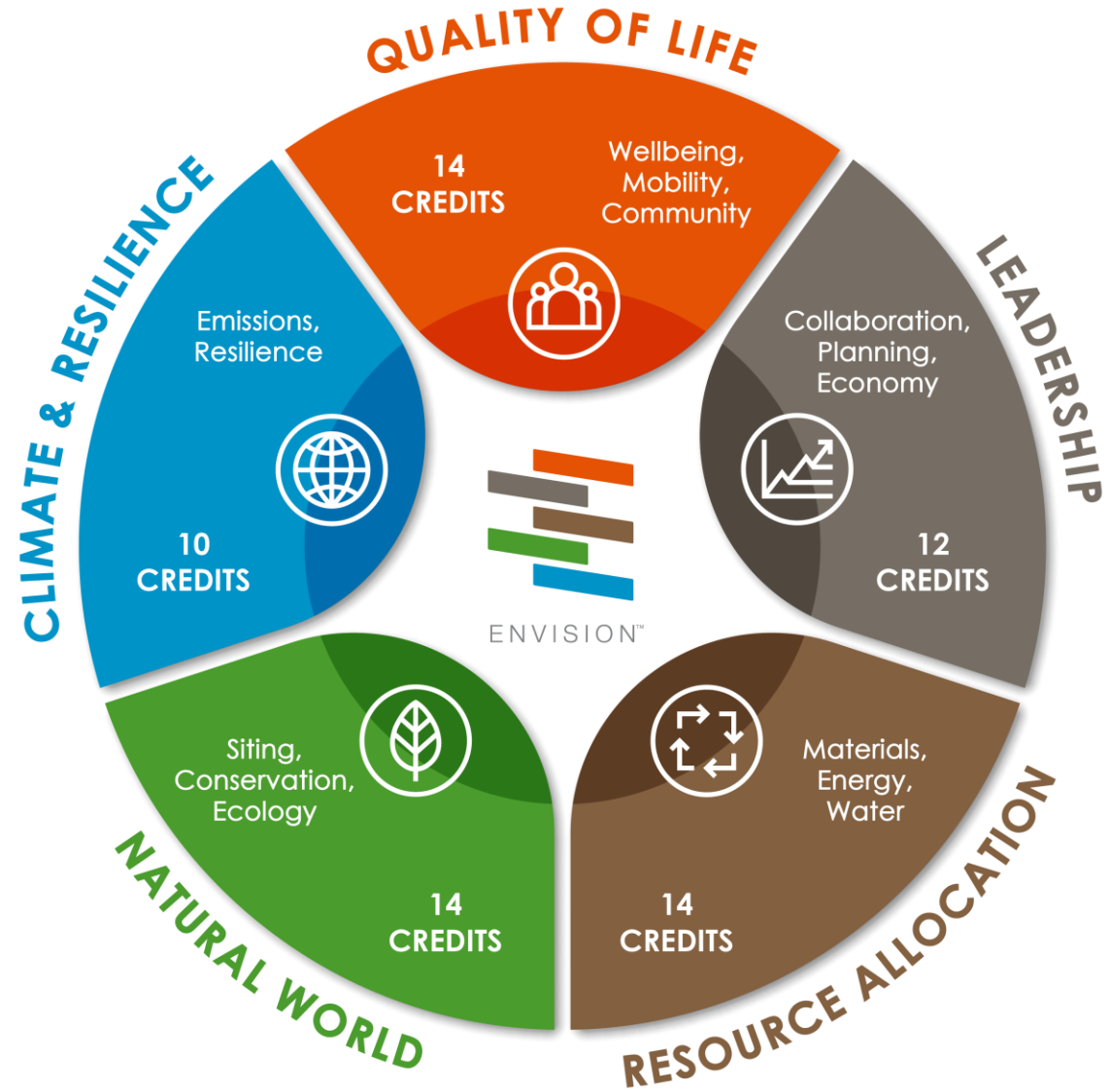


Gold
40-49%



Platinum
50% or more

5 Categories of Sustainability Indicators



64 Credits (Sustainability & Resilience Indicators)



**Quality
Of Life**
14 Credits

WELLBEING

- QL1.1** Improve Community Quality of Life
- QL1.2** Enhance Public Health & Safety
- QL1.3** Improve Construction Safety
- QL1.4** Minimize Noise & Vibration
- QL1.5** Minimize Light Pollution
- QL1.6** Minimize Construction Impacts

MOBILITY

- QL2.1** Improve Community Mobility & Access
- QL2.2** Encourage Sustainable Transportation
- QL2.3** Improve Access & Wayfinding

COMMUNITY

- QL3.1** Advance Equity & Social Justice
- QL3.2** Preserve Historic & Cultural Resources
- QL3.3** Enhance Views & Local Character
- QL3.4** Enhance Public Space & Amenities

QL0.0 Innovate or Exceed Credit Requirements



Leadership
12 Credits

COLLABORATION

- LD1.1** Provide Effective Leadership & Commitment
- LD1.2** Foster Collaboration & Teamwork
- LD1.3** Provide for Stakeholder Involvement
- LD1.4** Pursue Byproduct Synergies

PLANNING

- LD2.1** Establish a Sustainability Management Plan
- LD2.2** Plan for Sustainable Communities
- LD2.3** Plan for Long-Term Monitoring & Maintenance
- LD2.4** Plan for End-of-Life

ECONOMY

- LD3.1** Stimulate Economic Prosperity & Development
- LD3.2** Develop Local Skills & Capabilities
- LD3.3** Conduct a Life-Cycle Economic Evaluation
- LD0.0** Innovate or Exceed Credit Requirements



**Resource
Allocation**
14 Credits

MATERIALS

- RA1.1** Support Sustainable Procurement Practices
- RA1.2** Use Recycled Materials
- RA1.3** Reduce Operational Waste
- RA1.4** Reduce Construction Waste
- RA1.5** Balance Earthwork On Site

ENERGY

- RA2.1** Reduce Operational Energy Consumption
- RA2.2** Reduce Construction Energy Consumption
- RA2.3** Use Renewable Energy
- RA2.4** Commission & Monitor Energy Systems

WATER

- RA3.1** Preserve Water Resources
- RA3.2** Reduce Operational Water Consumption
- RA3.3** Reduce Construction Water Consumption
- RA3.4** Monitor Water Systems

RA0.0 Innovate or Exceed Credit Requirements



**Natural
World**
14 Credits

SITING

- NW1.1** Preserve Sites of High Ecological Value
- NW1.2** Provide Wetland & Surface Water Buffers
- NW1.3** Preserve Prime Farmland
- NW1.4** Preserve Undeveloped Land

CONSERVATION

- NW2.1** Reclaim Brownfields
- NW2.2** Manage Stormwater
- NW2.3** Reduce Pesticide & Fertilizer Impacts
- NW2.4** Protect Surface & Groundwater Quality

ECOLOGY

- NW3.1** Enhance Functional Habitats
- NW3.2** Enhance Wetland & Surface Water Functions
- NW3.3** Maintain Floodplain Functions
- NW3.4** Control Invasive Species
- NW3.5** Protect Soil Health

NW0.0 Innovate or Exceed Credit Requirements



**Climate and
Resilience**
10 Credits

EMISSIONS

- CR1.1** Reduce Net Embodied Carbon
- CR1.2** Reduce Greenhouse Gas Emissions
- CR1.3** Reduce Air Pollutant Emissions

RESILIENCE

- CR2.1** Avoid Unsuitable Development
- CR2.2** Assess Climate Change Vulnerability
- CR2.3** Evaluate Risk & Resilience
- CR2.4** Establish Resilience Goals and Strategies
- CR2.5** Maximize Resilience
- CR2.6** Improve Infrastructure Integration

CR0.0 Innovate or Exceed Credit Requirements

Envision Credit Detail



QUALITY OF LIFE: WELLBEING

QL1.1 Improve Community Quality of Life

26

POINTS

INTENT

Improve the net quality of life of all communities affected by the project and mitigate negative impacts to communities.

METRIC

Measures taken to assess community needs and improve quality of life while minimizing negative impacts.

LEVELS OF ACHIEVEMENT

IMPROVED	ENHANCED	SUPERIOR	CONSERVING	RESTORATIVE
A + B	A + B + C + D	A + B + C + D + E	A + B + C + D + E + F	A + B + C + D + E + F + G
(2) Community Considerations	(5) Community Linkages	(10) Broad Community Alignment	(20) Holistic Assessment & Collaboration	(26) Protecting The Future
(A) The project team identifies and takes into account community needs, goals, and issues. For example, the project team has located and reviewed the most recent community planning information and assessed relevant community needs, goals, and/or issues.				
(B) The project meets or supports community needs and/or goals.				
(C) The project assesses the social impacts it will have on the host and affected communities' quality of life.				
(D) The affected communities are meaningfully engaged in identifying how the project supports community needs and/or goals.				
(E) Based on the social assessment, potential negative impacts on the host or nearby affected communities are mitigated following a hierarchy that prioritizes avoidance, minimization, restoration, and offsetting.				
(F) Community satisfaction is demonstrated by feedback from the stakeholder engagement process verifying actions taken in criteria A, B, C, and D.				
(G) The project proactively addresses trends in changing social, economic, and/or environmental conditions within the community in order to ensure a high quality of life over the long term.				

Envision Use



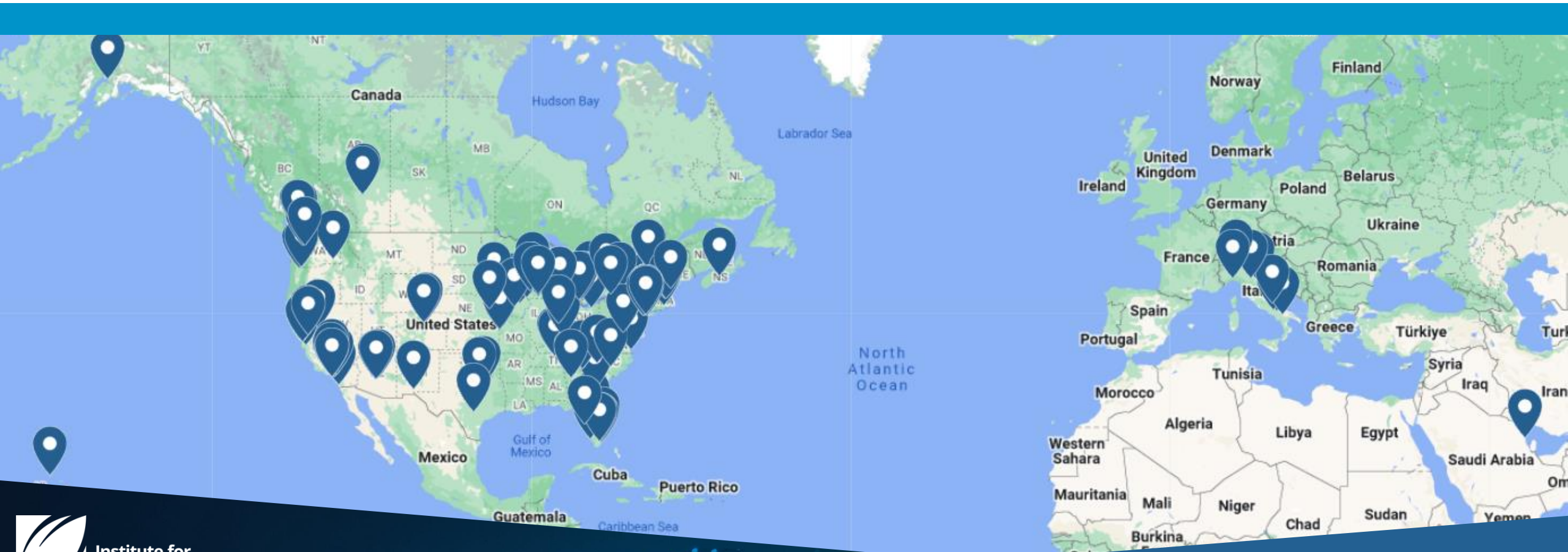
495+ projects – registered,
under review, and complete
~ \$357 billion+



11,200+ credentialed
professionals



850+ organizational
members



Applicable to All Types & Sizes of Infrastructure

Envision demonstrates versatility
across different sectors.



Transportation



Land/Environmental



Water



Waste



Energy



Information



East Colfax BRT Project

Denver, Colorado

ENVISION SILVER 2025



Carrera Séptima Corridor

Bogotá, Colombia

ENVISION SILVER 2025





Wever Solar

Wever, Iowa

ENVISION SILVER 2025





Bee Ridge Water Reclamation Facility

Sarasota County, Florida

ENVISION GOLD 2025

Osborn Street Plaza Project

New York City

ENVISION VERIFIED 2024



Treasure Island Water Resource Recovery Facility

San Francisco, California

ENVISION PLATINUM 2024



Entrance Building to the Vendôme Metro Station

Montreal, Quebec

ENVISION GOLD 2022





Gordie Howe International Bridge

Windsor, Ontario

ENVISION PLATINUM 2021



Institute for
Sustainable
Infrastructure

How Envision is Being Applied



State Legislation



City and County Resolutions



RFP Requirements



Design Guidelines

Infrastructure Canada Climate Lens

All federally funded infrastructure must conduct a climate change resilience assessment. Approved methodologies to assess climate change risk and resilience consistent with ISO 31000 include **Envision**.

California Bill SB-44 (2021)

Streamlined judicial review for environmental transit projects that meet sustainability goals.

“(F) The public agency demonstrates how it has incorporated sustainable infrastructure practices to achieve sustainability, resiliency, and climate change mitigation and adaptation goals in the project, including principles, frameworks, or guidelines as recommended by one or more of the following:

- (i) The sustainability, resiliency, and climate change policies and standards of the **American Society of Civil Engineers**.
- (ii) The **Envision Rating System of the Institute for Sustainable Infrastructure**.”





St. Petersburg Code of Ordinances

“It is the objective of the City that any new qualified City infrastructure project shall be designed and constructed to achieve the current **Envision gold standard**.”

Miami-Dade Board of County Commissioners (2017 and 2022)

Resolution directing the County Mayor “to incorporate **Envision** into the planning, design, construction, and operation of county-funded infrastructure projects where practicable and feasible.”

RFPs

Requiring an ENV SP

“As part of the County’s goal to incorporate environmentally sustainable design in infrastructure improvements, the Consultant is required to identify and provide a certified Envision Sustainable Professional (ENV SP) on its staff to assist with design.”

Requiring an Envision self-assessment

“For a project which requires Envision, the Consultant will be responsible for completing an Envision rating assessment using ISI’s online rating tool and following the Envision guidance manual...”

Requiring ISI third-party verification

“If third party verification is required, the Consultant shall be responsible for registering the project with ISI; gathering, preparing, and submitting all documentation to ISI that is required to complete the verification.”

LA DPW Sustainable Infrastructure Guidelines

The guidelines “have been developed to complement Envision.”

“...Although all SIG strategies are specific to LA County, they address every Envision credit.”

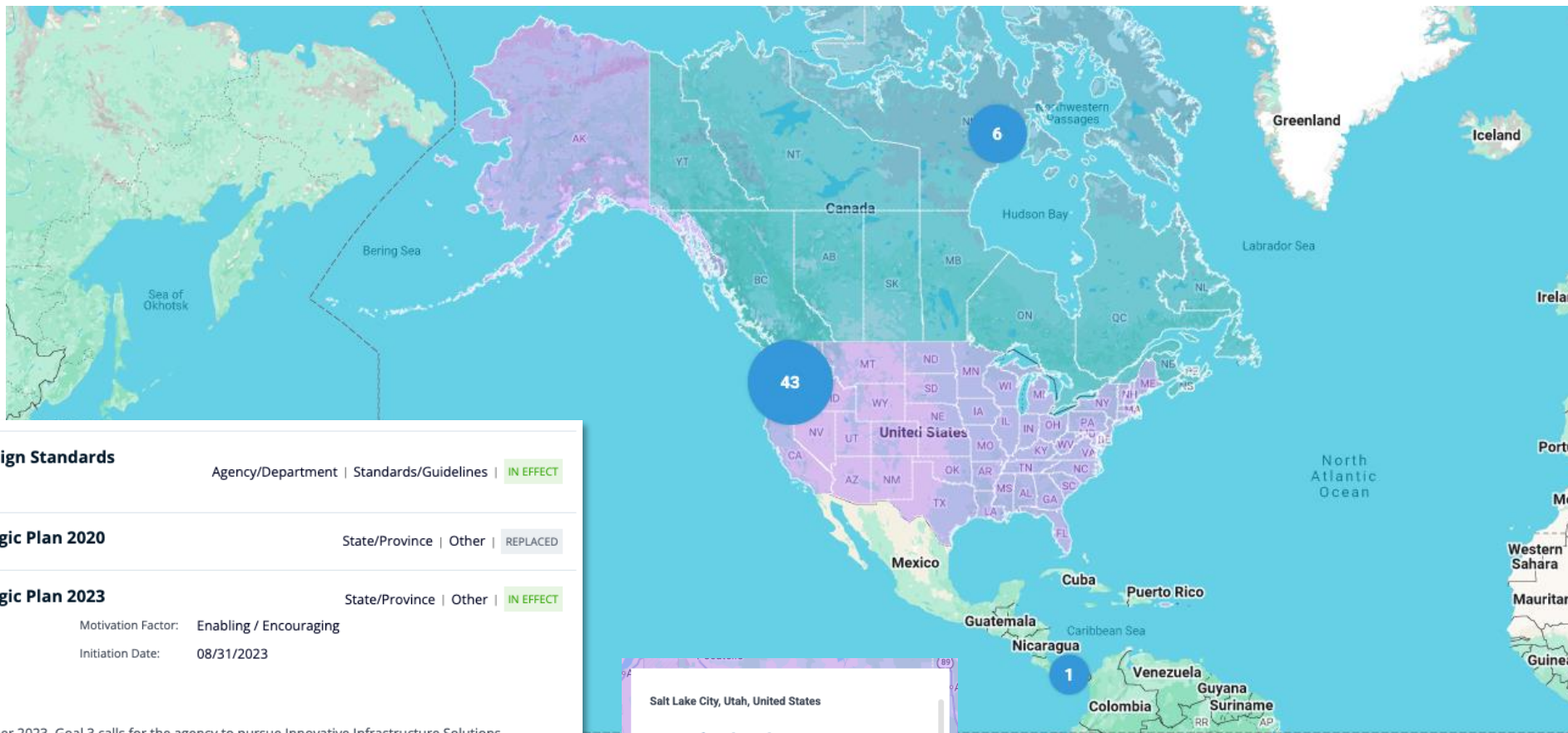
“An analysis was completed to determine that achievement of all required SIG credits equates to an approximate Envision rating equivalency of Bronze...”

Port Authority of New York and New Jersey Sustainable Infrastructure Guidelines

“With this update, the Port Authority Sustainable Infrastructure Guidelines Version 2.0 now leverages the Envision system, bringing PANYNJ into alignment with industry best practices while maintaining custom application criteria relevant to the Authority’s unique assets and operations.”

Policy Map

View online



▼ Austin-Bergstrom International Airport (AUS) Design Standards Manual 2024

Agency/Department | Standards/Guidelines | **IN EFFECT**

▼ California Department of Water Resources Strategic Plan 2020

State/Province | Other | **REPLACED**

▲ California Department of Water Resources Strategic Plan 2023

State/Province | Other | **IN EFFECT**

Policy Owner: California Department of Water Resources* Motivation Factor: Enabling / Encouraging
Sector: Water Initiation Date: 08/31/2023
Location: Sacramento, California, United States

This strategic plan by the California DWR was updated in September 2023. Goal 3 calls for the agency to pursue Innovative Infrastructure Solutions. Specifically, Objective 3: Implement Sustainability Best Practices outlines the following actions related to Envision:

1. By 2024, use Envision to inform new infrastructure project planning and design.
2. By 2025, support at least 10 new credentialed Envision Sustainability Professionals (ENV SP), with sustainability-related support activities in their duty statements....

[View more ▼](#)

Attachment

 [2023Sept-CA Dept of Water Resources - Strategic Plan.pdf](#)

11.17 MB

 [Link to Policy](#)

▼ California Department of Water Resources, Division Of Flood Management, Cost Share Guidelines For State-Local Cost Shared Flood Programs and Projects 2015

State/Province | Standards/Guidelines | **LAPSED**

Salt Lake City, Utah, United States

City of Salt Lake City, UT, Sustainable Infrastructure Policy 2024

The Policies and Procedures Manual for Salt Lake City, Utah, contains a chapter on Air Quality and Climate Change (Chapter 3). This section notes that, regarding sustainable infrastructure, as part of their scope of work City staff should evaluate, implement, and seek certification from at least one approved third-party certification program, to the extent practicable, to ensure environmental justice and sustainable infrastructure best practices are incorporated into all capital infrastructure projects that meet certain thresholds. This includes new infrastructure and major renovations proposed

Supplier Directory

View online

Purpose:

- Provide an opportunity for suppliers to **highlight their sustainable materials and services** for an audience that is seeking sustainable solutions
- Provide a resource for project teams looking to **identify materials, products, services, and technologies** that can help solve specific sustainability challenges

Institute for Sustainable Infrastructure

Search Sign Up Login

About Envision ENV SP Membership Verify a Project Resources Events Shop

ENVISION SUPPLIER DIRECTORY

Infrastructure owners, design teams, contractors, and other decision makers are looking for ways to improve the sustainability of their projects, including choosing materials and services that support their sustainability goals. The Envision Supplier Directory has been developed as a platform to help project teams connect with suppliers that provide materials and services aligned with the Envision Sustainable Infrastructure Framework. This directory includes listings for both materials and services, each associated with at least one Envision credit.

About Envision Supplier Directory Become an Envision Supplier

For any questions, please [contact us](#).

Disclaimer: A company's inclusion in this directory will not impact the independent, third-party verification process. The inclusion of a service or material in the directory does not constitute an endorsement or certification by ISI, or signify confirmation of sustainability attributes. Directory listings do not guarantee outcomes that suggest Envision award levels or an Envision total score.

Search...

Materials Service Country Services

Showing 1 to 14 of 14 entries 15

GRIMSHAW

Design

At Grimshaw we are leading the industry with our ambitious sustainability targets, and creating compelling, forward-thinking architecture and...

MSA

Architecture, MEP, Civil and Environmental Engineering

MSA Professional Services is an employee-owned, multidisciplinary consulting firm that provides engineering, architectural, environmental, and...

Linx strategies

Sustainability, resilience, and Envision advising

In 2021, Carly launched Linx Strategies, a strategic advising firm focused on advancing sustainability and climate resilience in the transportation sector...

Technical Assistance Program

- Provides a collaborative opportunity to connect infrastructure owners from small and economically distressed communities with ISI Verification resources, subject matter experts (SME), and academic partners



• PROGRAM GOALS

1. Develop new pathways for equitable access to Envision verification resources
2. Apply principles of sustainability to projects facing real-world challenges
3. Provide Envision verification experience to sustainability professionals and practical experience to students through which lessons can be learned

Envision Verification Submission



- Overview document supports applicants through the Envision verification submission process with step-by-step guidance



Key highlights include:

- Common first review steps for both Pathway A and Pathway B projects
- Specific steps for various review stages based on the chosen pathway

**To access this resource, you will need a free ISI user account. The document is located within the ISI user account dashboard, under the “Verification Resources” section.*

Guide to Procuring Sustainable Infrastructure Services

Purpose: Support infrastructure project owners with procuring sustainable services

Key Features:

- Best practices for assembling qualified sustainability teams
- Strategies for integrating Envision throughout the project life cycle
- Support for managing the Envision verification process
- Customizable procurement language and evaluation criteria

Access: Located on the ISI user account dashboard under “Procurement Resources”

1 | Purpose of this Document

This guide is designed to assist project owners in procuring Envision-related services to support the sustainability of infrastructure projects. It was written for public agencies, private developers, and other organizations involved in infrastructure planning, design, construction, and operation.

The Institute for Sustainable Infrastructure (ISI) prepared this resource in response to the growing interest among project owners in embedding the Envision framework into project development. Included are recommendations on assembling sustainability teams, considerations for implementing Envision throughout a project's lifecycle, guidance for managing the Envision verification process, terminology to support clear and consistent stakeholder communication, and sample procurement language and evaluation criteria.

Owners who are looking to demonstrate their commitment to sustainability, meet growing stakeholder expectations, and contribute to a more sustainable built environment will find adaptable recommendations and best practices for diverse projects. The guidance is also grounded in a background of general principles and processes for implementing Envision so that users at different stages in their sustainability journey can benefit.

Owners have a significant stake in incorporating sustainability on projects effectively and are using higher-performing projects to deliver on a range of environmental, social, and economic goals. It is hoped that this resource, by highlighting the connection between Envision procurement and implementation, will provide users with an additional set of insights with which to plan, design, and deliver more sustainable infrastructure.

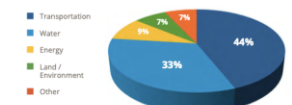
2 | Envision Overview

Envision® is a holistic sustainability framework and rating system that guides and assesses the sustainability and resilience of all types of infrastructure. It is an internationally recognized and comprehensive tool that can assist lead agencies, consultants, contractors, operators, and/or tenants in co-creating and delivering public and private infrastructure that can tackle climate change, prioritize public health and safety, cultivate environmental justice, spur economic benefits, and so much more. Envision is a blueprint to achieve these outcomes via a peer-reviewed scorecard that evaluates an infrastructure project's impacts and benefits against 64 credits. These credits are organized into five categories and 14 subcategories by subject matter.



An increasing number of public and private sector stakeholders are turning to the Envision framework to guide a more comprehensive approach to planning, designing, and delivering sustainable infrastructure. Organizations are establishing sustainability policies and standards at a company level and sustainability specifications at the project level while assembling skilled teams to manage and implement these sustainability goals. Detailed examples from industry leaders across sectors illustrate how Envision has bolstered their sustainable practices and processes, inspiring strategic integration of these practices into recurring project efforts.

Envision Projects by Sector - International
Registered, under review & complete



Total = 360 as of March 31, 2024
For the latest statistics, visit www.sustainableinfrastructure.org.

*This document is based on Envision version 3 (Envision v3). All Envision and ISI associated terms used throughout this document are defined in the glossary on p. 17.

3

NEW: Envision Project Team History



Highlights participation on Envision projects to:

- Celebrate accomplishments of Envision users
- Provide a directory for those seeking to connect with experienced ENV SPs

***Anyone with an ISI account** can view a *private* record of their participation on Envision projects through the ISI dashboard by selecting the “Projects” tab and then “Team History”

***ENV SPs who have opted in to having their profile included in our ENV SP directory** can view a *public* record of their participation within that directory on the ISI website.

**You can opt in to have your profile included in the directory by selecting “Edit Profile” on your ISI dashboard.*

The screenshot shows a web interface with two tabs: 'Projects' and 'Team History'. A red arrow points to the 'Team History' tab. Below the tabs is a search bar with a magnifying glass icon and the word 'Search'. Below the search bar are three columns: 'PROJECT ROLE', 'PROJECT ID', and 'PROJECT NAME'. Each column has a search input field. The 'PROJECT ROLE' field has a dropdown menu with 'Select' as the current selection.

ENV SP Directory

Use this directory to view a list of active Envision Sustainability Professionals (ENV SPs). The list can be filtered by region, trainer qualification, and/or role in completed Envision awarded projects. Please report inaccuracies to us at info@sustainableinfrastructure.org.

The screenshot shows a search interface for the ENV SP Directory. It includes three dropdown menus for 'Trainer', 'Country', and 'State/Province'. A red arrow points to the 'State/Province' dropdown menu, which is open, showing three options: 'Team Member', 'Project Leader', and 'Lead ENV SP'. To the right of the dropdowns is a search bar with the placeholder text 'Search...' and a 'Search' button. Below the search bar is an 'Export CSV' button.

TESTIMONIALS

“Envision goes beyond the basic efforts of project management and development, into areas that benefit the community in a holistic way.”

- Dave Koster, General Manager, **Holland Board of Public Works**

“Using the Envision certification process has helped the City become a better fiscal, social and environmental steward,”

- Max Kirschbaum, Public Works and Utilities Director, **City of Westminster**

“We’ve used Envision to build a culture of sustainability at Sound Transit.”

- Denis Martynowych, Senior Sustainability Planner and Designer, **Sound Transit**

Benefits of Envision for your Organization



Provides a free “off-the-shelf” framework that fosters **common understanding of sustainability** indicators and performance



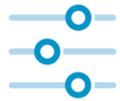
Enables **better project management** and a more streamlined process



Serves as a **single tool** for all infrastructure projects



Offers opportunity for **education and training programs** for staff and teams



Allows for **flexibility and customization** for unique organizations and projects



Supports sustainability **benchmarking and growth**

Benefits of Envision for You



Be a **Sustainability Leader**



Develop **new opportunities** to grow your knowledge, skills, and expertise



Serve as an example of **your organization's mission and culture** (*internally*)



Demonstrate your organization's **sustainability commitment** (*externally*)



Membership

WHO

- Public Agencies – Free
 - Envision-supported Agencies
- Private Companies
 - Envision Qualified Companies
- Academic Institutions
- Individuals

WHY

- Collaboration
- Resources
- Discounts



A network of industry experts leading the charge for sustainable infrastructure.

Envision Sustainability Professional (ENV SP)

WHAT

Designation becoming an increasingly important credential for any professional involved in civil infrastructure.

WHO

10,000+ worldwide: civil engineers, planners, designers, consultants, architects, CEOs & CFOs, government leaders, procurement professionals, post-secondary students and faculty, professionals passionate about sustainability

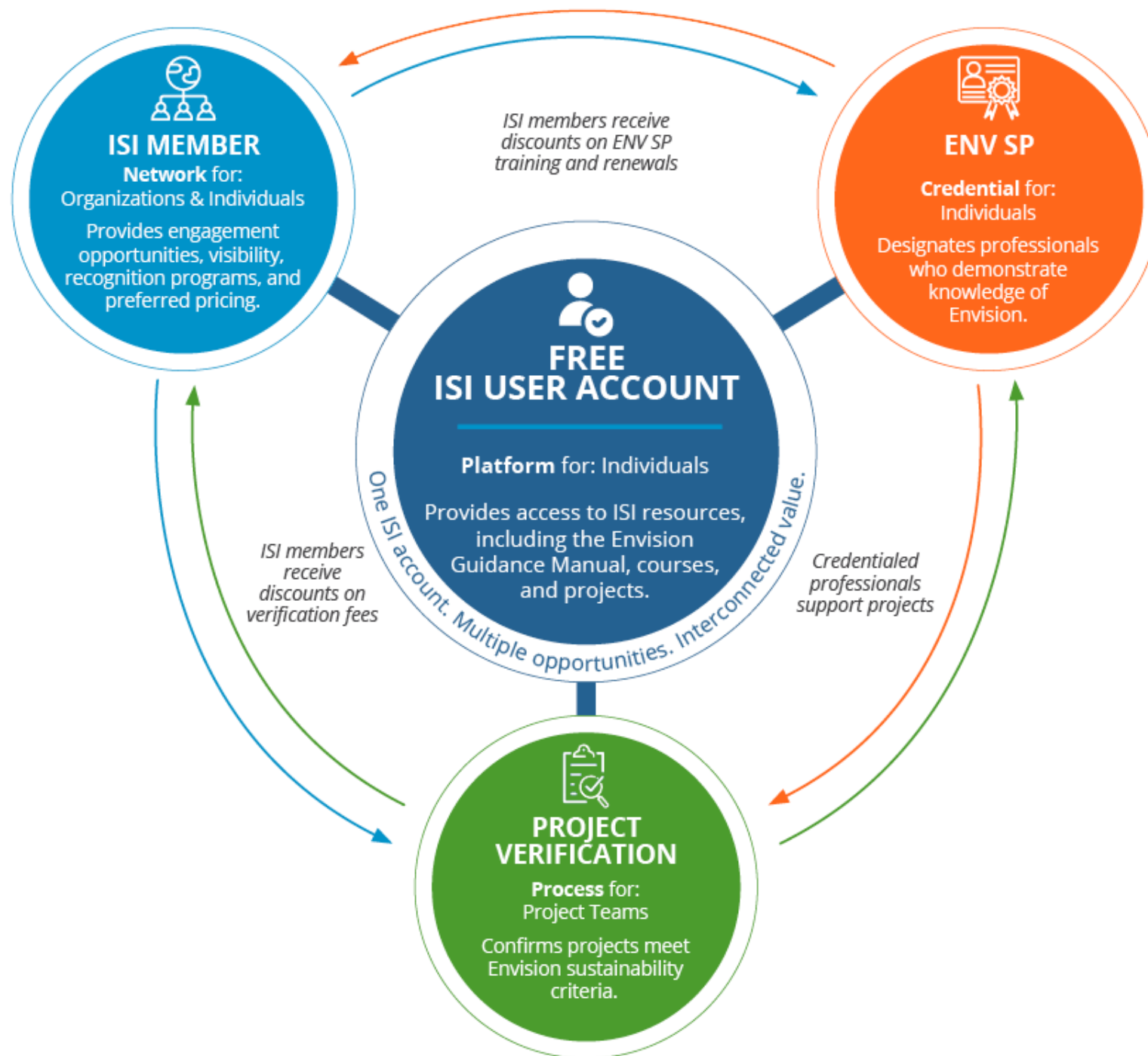
WHY

Staying updated with industry standards and best practices is essential for delivering high-quality solutions

Shows commitment to sustainable infrastructure
Enhances credibility



- Create a free account on the ISI site
- Candidates are required to complete the official ENV SP training and pass a comprehensive exam.
- Training offered as online course or live workshop.
- Completion of the course is a prerequisite for taking the exam



Thank You!

Anthony Kane, President & CEO
kane@sustainableinfrastructure.org

sustainableinfrastructure.org

Visit sustainableinfrastructure.org/next-steps or scan the QR code for ways to engage with us

- Learn about membership benefits
- Sign up for our monthly newsletter
- Explore ENV SP training & exam
- And more!
- Find Envision verification guidance

