



ENVISION®

The Blueprint for Sustainable Infrastructure



WHAT IS ENVISION?

Envision® is a holistic sustainability framework and rating system that enables a thorough examination of the sustainability and resiliency of all types of civil infrastructure. It is the only comprehensive tool in North America that can assist public and private agencies in delivering civil infrastructure that tackles climate change, addresses public health needs, cultivates environmental justice, creates jobs, and spurs economic recovery.

ENVISION CONSISTS OF:

- A guidance manual that includes 64 sustainability and resiliency criteria.
- Project assessment tools.
- Third-party project verification.
- Professional training and credentialing.

Envision has been successfully applied to more than 125 infrastructure projects, collectively worth more than **US\$106 billion** in infrastructure development.

WHO DEVELOPED ENVISION?

Envision was developed by the Institute for Sustainable Infrastructure (ISI) in collaboration with the Zofnass Program for Sustainable Infrastructure at Harvard University's Graduate School of Design. The American Public Works Association (APWA), the American Society of Civil Engineers (ASCE), and the American Council of Engineering Companies (ACEC) founded ISI and remain integral supporters.

BENEFITS OF ENVISION

Envision supports better project planning, design, and delivery by:

- Promoting environmental justice and social equity principles within project processes and decision making.
- Supporting communities to achieve carbon neutrality.
- Facilitating improved stakeholder engagement and interagency collaboration.
- Increasing the resiliency, preparedness, and long-term viability of civil infrastructure.
- Addressing a broad range of social, economic, and environmental indicators.
- Providing climate-ready infrastructure.
- Delivering fiscally responsible and resourceefficient infrastructure.

WHO USES ENVISION?

PUBLIC AGENCIES

Two-hundred-plus cities, towns, counties, public agencies, and academic institutions across the USA, Canada, and globally recognize or use Envision to guide infrastructure development. Los Angeles, New York City, Miami, Dallas, Denver, St. Petersburg, FL; Vancouver, and Montreal are a few of the *Envision Supported Agencies* who are delivering better roads, public transportation projects, airports, renewable energy facilities, water/wastewater projects, and other types of civil Infrastructure.

PRIVATE ORGANIZATIONS & ASSOCIATIONS

More than **250 private-sector** <u>companies and</u> <u>industry associations</u> embrace Envision solutions and collaborate with ISI and their clients to implement Envision. HDR, Stantec, AECOM, WSP, Tetra Tech, and many others are <u>Envision Qualified</u> <u>Companies</u>.



APPLICABLE TO ALL TYPES & SIZES OF CIVIL INFRASTRUCTURE



Energy

- Geothermal
- Hydroelectric
- Nuclear
- Natural Gas
- Oil / Refinery
- Wind
- Solar
- Biomass
- Distribution



Transportation

- Airports
- Roads / Highways
- Bridges
- Railways
- Public transit
- Ports & Waterways
- Active Transportation



Water

- Potable water distribution
- Water / wastewater treatment
- Capture / storage
- Stormwater
- Flood control
- Nutrient management



Waste

- Solid waste
- Recycling
- Hazardous waste
- Collection and transfer



Landscape

- Public realm
- Parks / Campgrounds
- Ecosystem services
- Natural / Green infrastructure
- Environmental remediation / restoration



Information

- Telecom
- Internet / Broadband
- Phones
- Data Centers
- Sensors
- Cables

Other sectors and project types that use Envision include: industrial projects (e.g., manufacturing facilities, warehouses, storage facilities), and food/agriculture projects (e.g., aquaculture, breweries, food manufacturing facilities).

FIVE CATEGORIES OF SUSTAINABILITY & RESILIENCE

64 credits in 5 categories

Quality of Life – 14 credits

Wellbeing, Mobility, Community

Addresses a project's impacts on communities, from the health, wellbeing, and equity of individuals to that of the larger social fabric.



Leadership – 12 credits

Collaboration, Planning, Economy

Rewards communication, collaboration, teamwork, leadership, and commitment to sustainability. Also rewards meaningful stakeholder engagement and lifecycle economic evaluation.



Resource Allocation – 14 credits

Materials, Energy, Water

Broadly concerned with the quantity, source, and characteristics of the resources needed to build infrastructure and keep it running.



Natural World - 14 credits

Siting, Conservation, Ecology

Addresses how projects are located within and affect the natural world and ecosystem services. Rewards projects that minimize negative impacts and those that protect and restore habitats.



Climate & Resilience - 10 credits

Emissions, Resilience

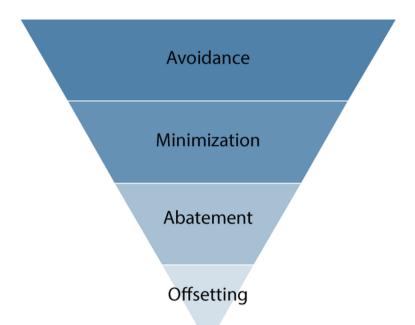
Focuses on minimizing emissions that exacerbate climate change and magnify short- and long-term risks; ensures projects are resilient and contribute to resilient communities.



ENVISION'S APPROACH

Uses proven, best-practice approaches to achieve sustainable, resilient, and equitable infrastructure. Examples include the following: mitigation hierarchy, triple-bottom line considerations, innovation, higher performance in three dimensions, and lifecycle considerations. (Descriptions are below.)

Mitigation Hierarchy



Envision employs a **Mitigation Hierarchy** that prioritizes the steps needed when building civil infrastructure.

Avoidance — measures taken from the outset to avoid creating negative impacts.

Minimization — measures taken to reduce the duration, intensity or extent of impacts that cannot be avoided.

Abatement — measures taken to rehabilitate degraded ecosystems.

Offsetting — measures taken to compensate for any residual adverse impacts.

Triple-Bottom Line Considerations

Sustainability is found in the triple-bottom line. In other words, Envision bolsters environmental protections and conserves resources, promotes social wellbeing / equity, and helps communities thrive economically.

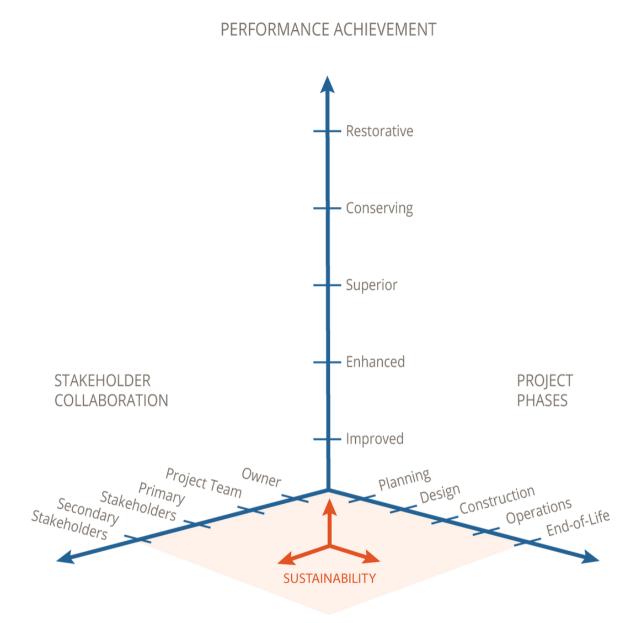


Innovation

Envision encourages innovation across all aspects of sustainability and resilience. Some topics and approaches in Envision are aspirational, laying out a best-case scenario and allowing projects to determine the best approach for achieving this scenario. Other approaches are a blank slate, allowing project teams to innovate and develop new solutions to suit their present and future needs.

OPPORTUNITIES FOR PERFORMANCE IMPROVEMENT

Incentivizing Higher Performance in Three Dimensions



Project Phases

The first dimension is the project life cycle. Here, project teams are using Envision to go beyond planning and design to the construction phase to consider operations, maintenance, and end of life considerations, such as the ability to disassemble and up-cycle materials.

Stakeholder Collaboration

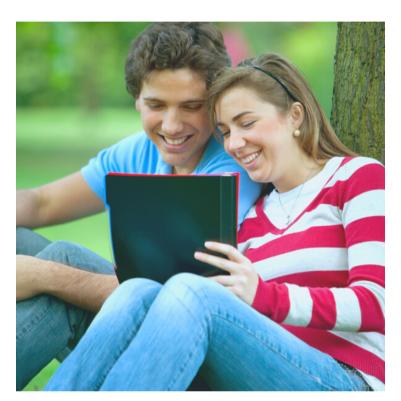
When an inclusive group is engaged throughout a project's planning and design phases, resultant projects satisfy the needs and desires of the community. Collaborations with stakeholders also identify the widest practical array of sustainability alternatives for consideration, including byproduct synergies and social benefits.

Performance Levels

Each credit in the Envision framework includes up to five levels of achievement, ranging from Improved (sustainable performance that is slightly above conventional practice) to Restorative (sustainable performance that results in the restoration of natural or social systems).

HOW TO GET STARTED BECOME A MEMBER ORGANIZATION & ENV SP

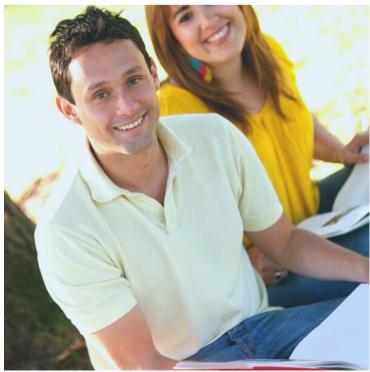
There are several ways to earn your Envision Sustainability Professional (ENV SP) credential. Becoming a member of ISI is the best way to start.



PUBLIC-SECTOR MEMBERSHIP

Any federal, state, provincial, local, academic, or public agency may apply for a **FREE** annual membership account with ISI by submitting an application. Once the public agency has an ENV SP on staff, the agency is considered an *Envision Supported Agency* and listed on ISI's website.

Envision Supported Agencies receive substantial training discounts for employees, and they are eligible for discounts on project verification.



PRIVATE-SECTOR MEMBERSHIP

Once a private organization becomes a member, they earn a **credit for one free ENV SP training— an 850-dollar value.**

When an organization has an ENV SP on staff, they are listed on ISI's website as an **Envision Qualified Company**. The organization then becomes eligible to receive 150 dollars' worth of discounts on each subsequent employee who becomes credentialed in Envision.

Credential renewals are discounted 30 dollars each year, and organizations can earn substantial discounts on third-party project verification.



Become an Env SP

The Envision Sustainability Professional (ENV SP) designation is becoming an increasingly important credential for any professional involved in civil infrastructure, worldwide. In fact, currently, more than 6,000 professionals maintain active ENV SP credentials.

Why earn your ENV SP?

The ENV SP credential demonstrates your passion for sustainability and signals to others that you have the knowledge and skills needed to apply ground-breaking Envision concepts to your daily work—ensuring infrastructure projects are sustainable, equitable, and resilient.

What you will Learn

- How infrastructure addresses the challenges inherent to sustainable development.
- The components of Envision.
- Using Envision to evaluate the sustainability of infrastructure projects.
- The Envision verification process.
- Using Envision to plan, design, and deliver more sustainable infrastructure.

Who Should earn the Credential?

Civil engineers, planners, designers, consultants, architects, CEOs, CFOs, government leaders, procurement professionals, students, and school staff are highly encouraged to earn the ENV SP credential, but any individual who is passionate about sustainability can become an ENV SP.



Why Verify Infrastructure Projects with Envision?



SHOWCASE YOUR PROJECT'S VALUE WITH ENVISION VERIFICATION

Collaborate, Document, Validate, Achieve,

It is one thing to say that an infrastructure project is sustainable and resilient, fights climate change, addresses environmental justice, creates local jobs, and spurs economic recovery, it's another thing to prove it. Envision verification provides that proof.

<u>Verification</u> is an objective, evidence-based approach that lends credibility to your project, and it showcases that the project is aligned with your community's needs and expectations.

Infrastructure owners, their consultants, and contractors who engage in the verification process feel a sense of accomplishment by demonstrating their work's ingenuity. There are "aha" moments that will change individual and team perspectives and lead to valuable insights for future projects.

Envision verification focuses on collaboration among internal and external project stakeholders to advance industry best practices and promote innovation.

REIMAGINE BETTER INFRASTRUCTURE

- Verification demonstrates that your project meets environmental, social, and economic standards.
- Exhibits accountability, improves project management processes, and elevates learning opportunities for stakeholders.
- Satisifies local, state, provincial, and federal regulatory requirements.

VERIFICATION BENEFITS

Instills confidence in ratepayers and taxpayers that their money is being well spent.

Encourages and rewards industry best practices, inclusive engagement, and sustainable performance to bolster community confidence.

Helps teams clearly define and document their sustainable, resilient, and equitable achievements.

Extends learning opportunities and knowledge of sustainable practices and processes.

Promotes collaboration and provides opportunities for better dialogue, innovation, and critical thinking.

COMMUNITY CONTRIBUTIONS



Creates jobs & stimulates the economy. s cost-effective & leads to longterm operational efficiencies.



Leads to significant reductions in GHG emissions & achieves carbon-neutral targets.



Reduces water & energy usage. Encourages sustainable material use.



Promotes social equity and community cohesion.
Improves public health, safety, and access to essential services.



Protects and restores habitats.







VERIFICATION PATHWAYS

There are two verification pathways: Pathway A allows you to pursue Envision verification during a project's design phase. Pathway B allows you to purse verification after construction is complete.



ENVISION AWARDS

Award levels are based on the percentage of applicable Envision points attained in verification.

What people are saying

The Benefits of Envision, Verification, and Being an ENV SP



Sylvain Paquet Senior Proiect Manager STM's Côte-Vertu garage (Envision Platinum)

"Obtaining this Envision recognition is an impressive achievement for the project team since all sustainability aspects of the project have been analyzed to incorporate best practices and to follow them meticulously during design and construction. It takes a lot of effort and rigor throughout the project and I tip my hat to my team for their work."



Dalo Sustainability

"As an advocate for sustainable development. my objective is to consult decision makers on how to implement principles of sustainability into infrastructure planning, design, construction, and operations and maintenance. My goal is to Specialist, DIALOG reduce project risks through increased transparency, stakeholder involvement. inclusive practices, innovation, and leadership."



Sr. Sustainability

Consultant

"The exciting part of working with a project team using Envision is watching the process that unfolds when sustainable topics introduced by the framework start active discussions about project and organizational sustainability. The resulting dialogue both helps the project team realize and highlight their existing sustainable practices and identify areas where their project or organization could be more sustainable. Sometimes these ideas begin as "what ifs," but lead to innovative improvements that enhance the project's sustainable performance and set a new standard in the industry."



VP of Canadian **Operations** at COWI

"In becoming an ENV SP, I really came to learn and appreciate the Envision framework and the level of detail associated with each credit. While I have yet to apply Envision to an active project as an ENV SP, the knowledge I have gained allows me to bring helpful insights to infrastructure projects across our portfolio."



CEO CEO & President, Lamp Rynearson (USA)

"If you really dig into the components of Envision and collaborate with clients — even if they're not wanting to get certified— it brings a process together; it's system-thinking at its finest."



Oscar Cortés **VP** International **Relations &** Infrastructure (MEX/USA) FEMCIC

"This type of process really fulfills the requirements under the UN 2030 agenda for Sustainable Development Goals, and it facilitates the implementation of processes and systems that can document how a Director Binational project is going to be, even for the planning, design, construction, and operation. It also involves a life cycle analysis."

Meet our Team

Please click on the titles below to read our team members' biographies.

