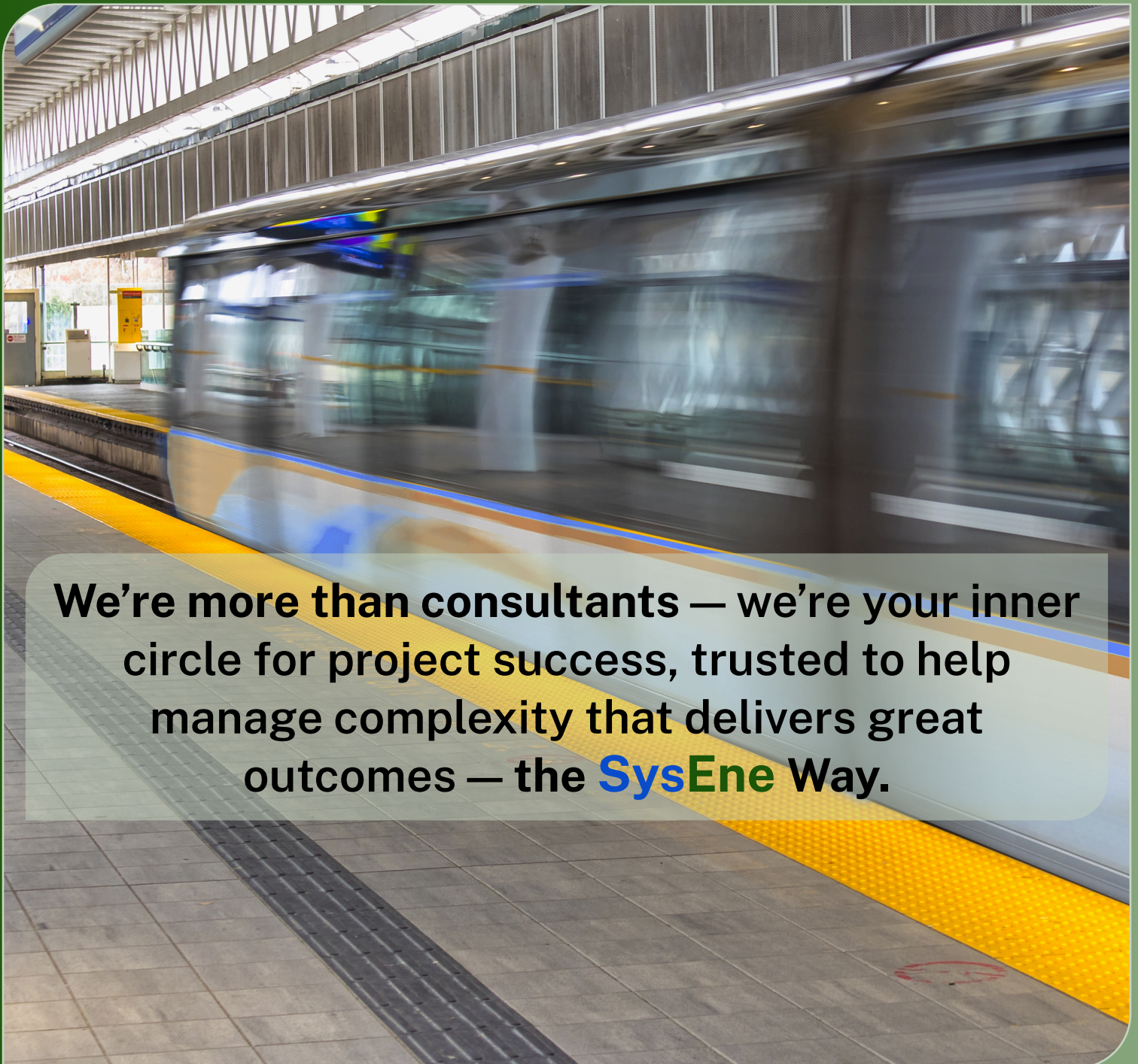


## Trusted. Embedded. Proven.



**We're more than consultants — we're your inner circle for project success, trusted to help manage complexity that delivers great outcomes — the SysEne Way.**





# Enhancing Complex Systems Capital Project Delivery Through the Systems Approach and Innovation

In an era of increasing complexity, systems capital projects require more than just traditional management. They are more effective with a systems approach — one that blends innovation, systems thinking, and effective stakeholder engagement to meet modern expectations.

## Why SysEne?

At SysEne Consulting, we bring a locally rooted, proven approach to managing complex systems capital projects. Today's capital projects and programs are more intricate than ever, driven by modern expectations, interconnected systems, and the challenge of delivering meaningful results while staying within budget. Too many projects fall short on outcomes or exceed cost projections — our approach ensures efficiency, innovation, and success. This approach blends two key aspects:

1. A holistic systems approach that considers life cycle, development, and operations.
2. Complex system delivery requires a broad team of the owner's staff and contractors that require trust, high-performance teams, and innovative approaches that are proven to be effective.

We specialize in comprehensive systems project management services, especially on behalf of organizations with complex capital portfolios.

Our team is unique and growing. We have delivered many successful projects, especially systems upgrades at TransLink and for many industrial clients in the energy efficiency and carbon management sectors.



## The Win-Win-Win Concept: A Partnership for Success

SysEne's approach to the Owner's Project Management isn't just about project delivery—it's about creating **mutual success** for all parties involved.

### A Win for the Owner:

By partnering with SysEne, the Owner gains a trusted, innovative partner who will help deliver infrastructure projects faster, at lower costs, and with higher quality. Our expertise in systems capital project delivery ensures that the Owner's capital projects are aligned with its broader objectives of modernizing the system and improving the Owner's business.

### A Win for SysEne:

At SysEne, we cultivate long-term partnerships, expand our portfolio of successful projects, and continuously grow our team of delivery specialists. Every success story continues to strengthen the value of our approach. Every successful project leads to goodwill and positive references from all the clients, stakeholders, and contractors. *"That is one of the best projects I ever worked on!"*

### A Win for the team members on the client team or contractor teams:

For the client staff, contractors, and consultants working with SysEne, this partnership fosters success, drives positive outcomes, and supports professional growth and development. By working on high-profile projects with SysEne's innovative, holistic management approach, clients and contractor teams have the opportunity to:

- **Deliver Successful Projects:** Collaborate on complex, high-impact projects that will shape the future of infrastructure in BC.
- **Advance Professional Growth:** SysEne typically works behind the scenes, either helping Director-level staff with strategic and innovative approaches to front line managers and staff with advice, mentorship, and professional growth. *"Now that you have helped me see from your expert perspective, I see everything with this lens now."*
- **Expand Their Networks:** Connect with a network of industry leaders, key stakeholders, and movers and shakers in the transportation, infrastructure, energy, and project management sectors — opening doors to future opportunities and collaborations.



## What SysEne Brings to the Owner's Capital Programs:

**Comprehensive Project Management:** We provide end-to-end management of the Owner's capital projects, from identifying business needs to ensuring successful project delivery and achieving expected business outcomes.

**Proactive Stakeholder Engagement:** Early and continuous collaboration with the organization's internal teams, contractors, regulatory bodies, and local communities aligns priorities, mitigates risks, and enhances project success.

**Risk Mitigation & Systems Engineering:** By integrating risk management with systems engineering best practices, we proactively identify potential issues, delivering innovative solutions that keep projects on track and within budget.

**Innovation for Better Outcomes:** Leveraging modern technologies such as modular design, prefabrication, production lines, agile software development, and digital tools. We streamline processes, reduce costs, and accelerate delivery.

**Collaborative Leadership:** Leading by example, we cultivate high-performance teams across Owner divisions and contractors, fostering effective planning and execution for superior project outcomes.

**Clear Objectives from Day One:** We establish well-defined, system-oriented objectives from the outset — not just focusing on cost and time, but optimizing life-cycle value, minimizing O&M costs, and enhancing long-term business performance.

**Expedited Project Approvals:** Working strategically with authorities and regulators, we accelerate approval processes while ensuring robust planning for successful long-term outcomes.

**Commitment to Safety & Security:** We integrate safety and security into every phase of a project's life cycle, prioritizing these critical elements from initial design through implementation and future operations.

## Why This Matters for the Owner:

As Owners seek to modernize their infrastructure, the complexity of its projects will continue to grow. SysEne's approach ensures that each project will be:

- **Faster:** Effective processes reduce delays.
- **More cost effective:** Innovative strategies deliver capital projects with lower total costs.
- **Higher Quality:** Advanced methodologies ensure best-in-class results.

By embracing a systems-based approach and leveraging innovation, we help Owners navigate the challenges of modern infrastructure projects, empowering them to build a stronger future for British Columbia.

### Let's Build the Future. Together.

At SysEne, we're committed to supporting the Owner with our Owner's Project Management services — managing complexity, driving innovation, and delivering excellence in every project.

**Contact us today to discuss how SysEne can help drive the success of your capital projects.**

**SysEne Consulting Inc.**

craiglouie@sysene.com

+1 (604) 721-1466

#700 - 838 West Hastings St,  
Vancouver, BC V6C 0A6



## Our Team:



### **Craig Louie, P.Eng.**

Co-Founder of a systems engineering and management consultancy that helps clients deliver on projects that matter. Over thirty years experience successfully delivering complex systems in the energy, automotive, and mass transit systems. Change agent, team-builder, trusted advisor.

### **Stephen Czerniej, P.Eng., PMP**

Experienced Systems Engineer and Project/Program Manager with 15+ years in infrastructure and product design across railway, automotive, maritime military, machine vision, and infrastructure systems. Specializes in stakeholder and requirements management, with a strong focus on interface control to ensure seamless system integration.



### **Chris Balicki, MBA, P.Eng., PMP**

Dynamic project leader with expertise in infrastructure, process engineering, and R&D. Strong believer in teamwork, skilled in managing complex projects through relationships, clear communication, and proactive collaboration.

[\[Meet the whole team\]](#)

## Case Studies:

### **1) Increasing Non-Revenue Rail System Construction During Operations**



SysEne was tasked with upgrading 33 rail stations with 3,000 new displays, speakers, and CCTV cameras, and faced delivery time pressures, as work had to be completed in a limited 2-hour non-revenue window, often reduced to just 90 minutes due to various factors, with initial estimates showing a \$30M+ budget overrun. To maximize efficiency, SysEne implemented an innovative "manufacturing line" approach, enabling learning curve effects, safe work methods, and productivity enhancements, while seamlessly integrating contractors, consultants, and operating staff for streamlined execution. The result was a high-quality, on-time, and on-budget project that exceeded expectations, reduced costs by \$25M, minimized customer disruption, and earned widespread acclaim.

[\[Read More\]](#)

### **2) Flexibility transcends constraints: Upgrading a Constrained Rail Station Power System**

The client's rail station, originally built in 1985, required a power system upgrade to support doubled energy demands, but space constraints and operational challenges made modernization complex. SysEne navigated these logistical hurdles with a creative, phased approach, ensuring seamless integration while keeping the existing system running. The result was a successful, ahead-of-schedule implementation that earned high praise from the owner's team.

[\[Read More\]](#)



### **3) Delivering Customer Experience Systems Upgrade**



The client needed an advanced real-time customer information system for their rail network, enhancing customer experience with modern displays, accurate predictions, and live alerts. Our solution combined agile software/content development with structured hardware implementation, fostering innovation, collaboration, and resilience. The result was a groundbreaking upgrade, hailed as the agency's most successful, winning industry awards while significantly improving customer trust, satisfaction, and operational efficiency.

[\[Read More\]](#)