

framato**me**

Global strength.
Local expertise.



Power on.
Together.



Framatome Canada

Global strength. **Local expertise.**

To help ensure the future of clean, reliable, low-cost energy in Canada, we:

- dedicate ourselves to growing the regional economy.
- commit to improving the well-being of the workforce.
- continue to invest in the communities where we live, play and work.

At Framatome, we live, play and work here, so we're committed to the region's economic development. Our people are dedicated to fulfilling Canada's vision of a clean energy future. We've more than doubled our full-time and trades staff over the last five years. Building our team with local skilled workers, we've created a High Voltage Electrical Program, a Certified Nuclear Worker Program, and a Weld Program.

As a proud member of the Canadian Council for Indigenous Business (CCIB), we are dedicated to honoring the Indigenous communities of Ontario, and to moving forward in the spirit of reconciliation and respect, leading by example in this industry.

We actively support the CANDU Owners Group (COG) through COG's Suppliers Participation Program as well as an R&D program. Our contributions focus on aging management, chemistry & materials and outage reduction R&D projects.

To help direct our industry standards, Framatome chairs and participates in numerous technical committees and sub-committees for the CSA Group. We also hold voting representation on the Nuclear Strategic Steering Committee.

To help make a difference in our community, we spend countless volunteer hours working alongside you in support of charities, health and human services efforts, economic development organizations and local events.

You can trace our roots in Canada to 1964, only two years after Ontario's first power generating reactor went online. With Ontario offices in Pickering and Kincardine and a Quebec office in Montreal, Framatome Canada Ltd. is a major provider of services and engineering for the Canadian and global CANDU market.



We can do more than you realize.

For life extension success and delivering carbon-free energy, you need a broad, proven portfolio of solutions and refurbishment experience. Framatome delivers unlimited, state-of-the-art solutions and is eager to support the global CANDU fleet with sustainable nuclear technology.

Framatome has been an invested partner in delivering carbon-free energy to Canada's power grid for generations, with a broad and proven portfolio of refurbishment experience and solutions for life extension success. Our unique access to global experts and innovative technology allows us to provide the Canadian marketplace with engineering, procurement and construction (EPC) services under one umbrella.

Supporting the global CANDU fleet with sustainable nuclear technology, Framatome Canada delivers unlimited, state-of-the-art solutions in high voltage maintenance, general maintenance, rotating equipment, heavy and mobile component replacement, inspections, outage services and outage optimization.

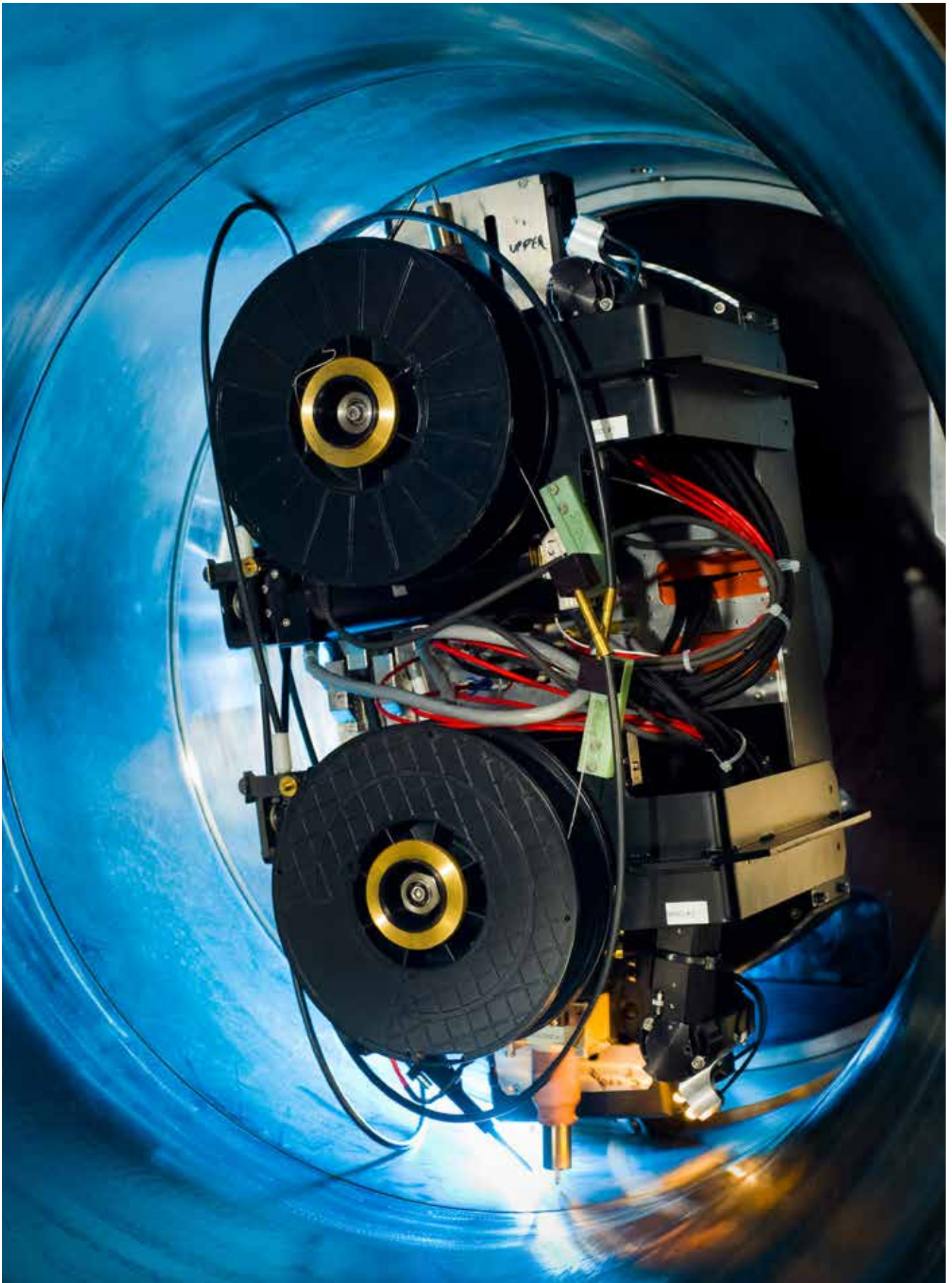
At Framatome Canada, we are committed to developing a dynamic innovative ecosystem, addressing the challenges facing the Canadian nuclear industry and transforming new ideas into reality.

We want to:

- identify and understand the challenges the CANDU industry is facing
- advocate cutting-edge services and products to solve those challenges
- constantly communicate with customers while providing products and executing services

Globally, we're involved in building six new nuclear reactor projects, spanning design, through procurement and supply, and onto commissioning. We're recognized in Canada and around the world for delivering innovative solutions and value-added technologies for designing, building, maintaining and advancing the global nuclear fleet.

For 60 years, Framatome has been a local partner with global nuclear services experience and proven solutions.





Challenge:

Optimization of facilities while strengthening nuclear safety is the primary challenge in today's environment. Achieving operational excellence and ensuring safety, quality, performance and delivery is paramount.

CANDU owners need a proven vendor to:

- Reduce cost, dose and time on critical path
- Resolve emergent issues quickly
- Improve reliability and plant performance with rigorous planning and preparation
- Invest in strengthening people, the community and the economy
- Safely improve task efficiency and schedule adherence
- Provide extensive knowledge and technologies to support life extension, refurbishment, decommissioning and new build programs
- Provide solutions for securing the future of nuclear power
- Offer innovative, clean energy solutions
- Provide dependable stability and commitment

Canadian utilities need a partner for collaboration, development and generation of solutions for a clean energy future.

Solution:

Committed to providing safe, clean, reliable and affordable energy, Framatome focuses on delivering real solutions and tangible results while meeting or surpassing customer safety expectations, cost and schedule. We provide a total package of solutions to alleviate risk and improve performance. We work with our customer to understand their needs providing solutions and a wide range of services.

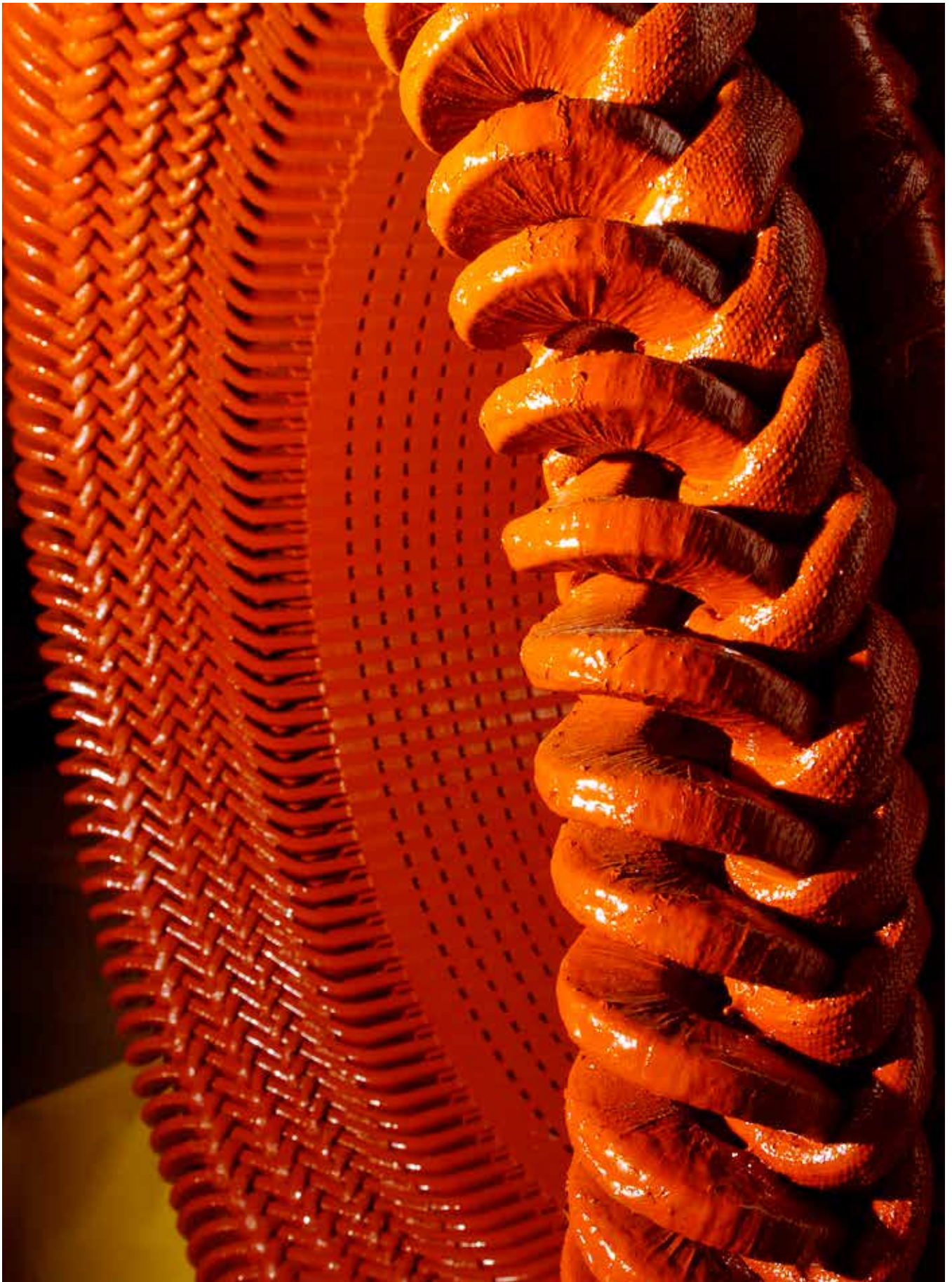
We have substantial experience in ‘first-of-a-kind’ projects, all backed by a strong culture of learning and continuous improvement. We utilize the latest technological advances for plant modernization and back-fitting to upgrade the CANDU fleet to current codes and standards using an established quality system.

Framatome has a strong relationship with the Institute of Nuclear Power Operations (INPO) and the **World Association of Nuclear Operators (WANO)**. One of their most actively engaged members, we are an integral and active part of the program. Using INPO’s “The Objectives and Criteria for Accreditation of Training in the Nuclear Power Industry”, and working closely with the **Canadian Union of Skilled Workers (CUSW)** we created the **Certified Nuclear Worker (CNW)** Program.

This program elevates the qualification of Trades Labour in Canadian nuclear plants by ensuring that employees working onsite are subject to an intense qualification process and have the necessary training, skill set, qualifications, technical expertise and proficiency to excel for a nuclear site worker.

Framatome’s Outage Control Center (OCC), an invaluable resource provided at no charge to customers, is at the heart of operations providing vital central monitoring and response to customers’ operations on a 24/7 basis throughout the year. Based at Framatome’s Operational Center of Excellence in Lynchburg, Virginia, USA and in Erlangen, Germany, the OCC acts as the “one face of Framatome” and provides the foundation for flawless execution of field projects.

We are committed to the long-term viability of the CANDU fleet and are innovating and establishing strong, reliable, local partnerships to meet customer’s needs.



Strong Toolbox of Solutions

With 60 years of international experience in all types of technologies and maintenance of more than 250 reactors worldwide, our proven dedication to clean energy solutions is unmatched.

Our teams have expertise and knowledge in engineered technical solutions, high voltage maintenance, general maintenance, rotating equipment, heavy and mobile component replacement, inspections, outage services, outage optimization, I&C and cybersecurity.



Nuclear Services

The value of safety, experience and extensive resources

Our solutions include:

Chemistry

Chemistry & Materials Center (CMC) lab specializing in chemistry, corrosion and metallurgical examinations — off-the-shelf or tailored solutions and testing capabilities.

- Film forming amines
- System decontamination
- Water chemistry

Component Repair and Replacement

Our customers can benefit from a sole source, fully-integrated supplier from engineering analysis, design specifications, and engineering change packages, to innovative and cost-effective tooling, repairs, site modifications and component replacements.

Heat Exchanger Services

Providing a wide range of services from tube inspection and maintenance activities to life extension repairs and component replacements. Framatome offers a suite of solutions for shell-to-tube heat exchangers backed by engineering.

Metrology

Full-scope metrology capabilities for precise fit-up.

Non-destructive Examination

- In-pipe manipulators
- Inspection with submarine (SUSI)
- Internals inspection
- FLÜS — high-sensitivity leak detection and localization and humidity measurement system
- Reactor vessel and head inspection
- Steam generator inspection

Nuclear Parts Center

- Stocks approximately 25,000 parts per year at the level B storage facility (ISO 9001 and 18001 certified)
- ASME N, NPT and NR Certificates of Authorization
- Customer Inquiry System (framatome.com/npc) provides 24/7/365 access to spare parts inventory, guaranteed stocking programs, supply chain management and technical support.

Rotating Equipment Services

- Contaminated, safety-related and ASME code repairs
- Performance analysis
- Primary/auxiliary pump refurbishment
- Pump and motor field services
- Pump and motor refurbishment and maintenance shop

Steam Generator Services

Generator cleaning, inspection and maintenance services.

Welding

Qualified, ASME code welding program — from engineering to execution.



Instrumentation and Control

Framatome employs over 2,400 global I&C experts with decades of experience installing more than 440 full I&C systems worldwide.

Framatome's I&C solutions offer increased safety, higher performance and greater flexibility over the long term.

Framatome solutions range from safety automation systems to automation systems for normal operation and nuclear instrumentation for life cycle solutions. We build proven simulators with global I&C engineering expertise including human-machine interface design and human factors engineering.

Our solutions include:

- TELEPERM XS Compact FPGA-based digital I&C platform for safety and standalone applications
- Hardline state-of-the-art analog safety I&C platform
- Tricon Digital Control System featuring true triple modular redundant fault tolerant controller
- Foxboro Distributed Control System
- Loose parts monitoring system for detection and analysis of loose parts

Cybersecurity

FoxGuard Solutions, a subsidiary of Framatome, has a team of engineers and developers that design, manufacture and integrate innovative cybersecurity, computing and regulatory compliance solutions. We deliver reliable, secure and configurable applications to protect operational technology in critical energy infrastructures.



- Compliance program development and validation
- Cybersecurity assessments
- Full technical solution architecture and integration to keep systems compliant and secure
- Patch and update management
- System hardening

FoxGuard Solutions has been providing technology solutions for more than 40 years, focusing on the power and utilities market for the past quarter-century. They've worked with 230 North American utilities and performed operations in 34 countries.

Engineering & Systems

Integrated Procurement Solutions (IPS)

Framatome offers a one-stop source to address procurement engineering challenges by delivering needed parts on time with reduced costs.

- Global supply chain for difficult-to-source parts
- Commercial grade dedication (CGD)
- Component testing and qualification
- Obsolescence solutions, including IEE and reverse engineering

Our solutions include:

- Aging management
- Containment analysis
- Digital modeling and simulation
- Filtered containment venting systems (FCVS)
- Fluid dynamic calculations
- Framatome fatigue concept
- Mechanical and component engineering
- Plant modernization solutions
- Structural analysis
- Valve qualifications
- Seismic analysis and qualification
- Environmental qualification (EQ)

Products

- BIRNS Lighting
- Condition-oriented aging management system (COMSY)
- Control spray valves
- Demineralized water shut down gradient
- Filtration products
- Hydrogen monitoring systems (HERMETIS)
- Limitorque parts/motors/actuators
- Passive autocatalytic converters (PARs)
- Technofast fastening products
- TopWorx proximity probes

Framatome provides design, construction, commissioning and inspection services. Our engineering resources offer expertise from life cycle asset management to commercial grade dedication.

CANDU Life Cycle Management

With multiple patents and collaborative awards for customer-specific challenges, Framatome has developed state-of-the-art solutions for life cycle management of CANDU plants.

AIDA Integrated Data Analysis Platform

Developed by Framatome, AIDA auto analysis system for steam generator tube inspection is a synergy of three independent tools. This qualified, proven solution provides automated reports and unambiguous results, reducing time and personnel required.

- Capable of any manual or automated analysis scenario
- Comparison from multiple inspections to assess change and detect new degradation
- Independent tube verification using ET signatures
- Multitude of parallel analyses; flaw, non-flaw, deposit and structure mapping, noise and monitoring

Dry Containment Filtered Venting Systems

Hydrogen (H_2) generation and the risk of H_2 combustion during a severe accident poses a complex safety issue. Mitigation of H_2 hazards may depend on the knowledge of the H_2 containment concentration. Framatome's system monitors the containment concentration of H_2 for more efficient operation.

Film-forming Amines (FFA)

Framatome's patented, effective and field-proven technology preserves the steam generator's integrity by minimizing corrosion product transport and thus final deposit load.

- Optimizes outage schedules
- Reduces costly lay-up procedures of water-steam cycle components.
- Minimizes consumption of the harmful conditioning agent hydrazine during the outage and subsequent fuel cycles

Chemical Decontamination

Our chemical decontamination technology dissolves metal oxides and radionuclides on surfaces contaminated with radioactive materials, reduces the radioactivity level and collective radiation exposures during maintenance, repairs and decommissioning.

Our highly advanced technology is extensively tested and is flexible enough to meet customer requirements, process safety, time constraints and residual dose rate level needs while keeping generated waste volume to a minimum. A safe effective method for dose reduction, resolving problems with system maintenance, refurbishment, inspection and dismantling activities, and ultimately preventing a reduction in power.



Metroscope

This state-of-the-art, knowledge-based artificial intelligence system has been used in plants around the world to detect and diagnose early-stage problems before they become major sources of lost productivity and maintenance expense.

- Valve faults/misalignments
- Two-phase water-level faults
- Tube ruptures/leaks
- Blockage or fouling
- Instrumentation drift
- Pump performance degradation
- Internal leakage



Medical Isotopes

Isogen, a joint venture between Framatome and Kinectrics, is on a mission to harness the healing power of nuclear energy.

Isogen has successfully completed the **world's first Isotope Production System (IPS) installation within a commercial power reactor**. The process inserts, irradiates and then removes targets without interrupting the power generation of the CANDU reactor.

Our IPS has been reliably creating life-saving Lutetium-177 (Lu-177), used to treat prostate cancer and neuroendocrine tumors. Isogen's technology is adaptable and scalable, allowing us to produce the world's largest and most reliable supply of multiple life-saving medical isotopes needed to treat and diagnose patients with cancer and other serious diseases.





Electrical Services and Hardware

Bringing innovation to the table

High Voltage Maintenance and Construction

Framatome's High Voltage Program team was developed as a 'turn-key' high voltage refurbishment and replacement provider comprised of various specialized tradespeople working under our quality program.

Electrical Products and Services

- Breaker and bus replacements
- Disconnect switches — metal clad switchgear
- Low and medium voltage breakers
- Main output transformers
- Maintenance Interval and Life Extension Solutions (MILES) — comprehensive equipment qualification and preventative maintenance program
- PCB transformer replacement (PHT distribution and excitation transformers with silicon-filled transformers)
- Switchboard/panelboard replacements
- Transformer oil processing
- Variable frequency drives



Safety and Security — more than just priorities

Safety is critical; it is our fundamental value that promises sustainability and a future for the nuclear industry.

Our approach to environmental, health and safety is based on our belief in the necessity to eliminate damage to the environment, equipment, and property, while protecting our clients and the general public whenever and wherever they interface with our work.

We deploy a strong Electric Power Research Institute (EPRI) and INPO-based nuclear safety program into the performance of every project. Framatome management firmly believes consistent safe performance requires continuous reinforcement to stay focused and eliminate complacency. While every employee has to own safety, creating and maintaining the right safety culture is a journey requiring continuous focus.

With prevention and transparency, we aim for excellence, with zero industrial accidents and zero INES level 2 or higher nuclear incidents or events. Our commitment to supplying the most effective solutions in order to achieve the highest levels of safety is the cornerstone of operational excellence and our performance.

Examples of Safety First:

- Analysis of accidents or near misses to identify vulnerabilities and create an awareness program
- SAFE ONE Program — The goal of SAFE ONE is to maximize employee participation in safety activities. “Individual action, shared success” creates an optimal environment for us to reach our goal of zero work-related injuries.
- Human Performance Observation Program
- Employee-led Safety Advocate Program
- Advanced planning and the early establishment of project health and safety
- Implementing proven industry safety practices



Operational Excellence

The performance of our customers is our everyday commitment.

Framatome is accountable to our customers, our employees and our stakeholders. To execute one of our strategic priorities to deliver timely, sound solutions to meet the highest level of quality standards in our industry, our teams strive each and every day to improve and to overcome challenges faced in the field.



Safety.

First and foremost, the critical success factor for our people, products and services.



Performance.

Fueled by our people and innovation for our customers.



Quality.

First time, every time.



Delivery.

Reliable, predictable and consistent.

We follow the standards of excellence:

Safety, Quality, Performance and Delivery

Framatome nuclear-based programs are essential to enhanced safety performance, reducing your organizational risk and ensuring cost certainty and schedule integrity.

Considering it a constant journey, our team looks for new ways to raise the bar on performance.

With accountability, customer focus, and self-assessments at the heart of our culture, we seek to maintain a focus on process, efficiency, effectiveness and professional development for our personnel. Our team places a daily emphasis on performance-driven services, planning and readiness, a commitment to training and continuous innovation. And it's these key elements that serve to motivate our personnel to help you — our customer — succeed.

Framatome is an international leader in nuclear energy recognized for its innovative, digital and value added solutions for the global nuclear fleet. With worldwide expertise and a proven track record for reliability and performance, the company designs, services and installs components, fuel and instrumentation and control systems for nuclear power plants. Its more than 20,000 employees work every day to help Framatome's customers supply ever cleaner, safer and more economical low-carbon energy.

Visit us at www.framatome.com, and follow us on X and LinkedIn.

Framatome is owned by the EDF Group (80.5%) and Mitsubishi Heavy Industries (MHI – 19.5%).

For additional information, contact:

Jason Burnett

Engineering Manager

Framatome Canada

Jason.Burnett@framatome.com

Bryan Goode

Chemistry & Technology Manager

Framatome Canada

Bryan.Goode@framatome.com

or:

info.canada@framatome.com

Kincardine

2091 Highway 21

RR2

Kincardine, Ontario N2Z 2X4

Montreal

5070 François Cusson

Lachine, Quebec H8T 1B3

Pickering

925 Brock Road

Pickering, Ontario L1W 2X9

See how our solutions
can work for you
<https://bit.ly/FramatomeCA>



Your performance
is **our** everyday **commitment**

framatome****

Tricon and Triconex are registered tradenames of Schneider Electric. QuarTec is a trademark of Framatome or its affiliates, in the USA or other countries. The data and information contained herein are provided solely for illustration and informational purposes and create no legal obligations by Framatome. None of the information or data is intended by Framatome to be a representation or a warranty of any kind, expressed or implied, and Framatome assumes no liability for the use of or reliance on any information or data disclosed in this document. Property of Framatome or its affiliates.
© 2025 Framatome Inc. All rights reserved. B_US_744_ENG_05-25