

FluxGen Industries Ltd.

Forging Tomorrow's Welds

From molten core to global connection — FluxGen powers the world's welds

Localizing SAW Flux Manufacturing in Western Canada

Presentation for Economic Development Office November 25, 2025

Confidential Business Plan Summary

The Problem: Supply Chain Vulnerability

Western Canada's Welding Materials Market is Import-Dependent

Key Challenges:

- 80%+ of SAW flux imported from Asia and Eastern US
- Long lead times (4-8 weeks) impacting project schedules
- Supply chain disruptions during COVID-19 and geopolitical tensions
- Limited local technical support and application expertise
- High transportation costs adding 15-25% to product costs
- Quality inconsistencies from overseas suppliers

Market Pain Points:

- Energy companies struggling with material availability for pipeline projects
- Fabricators carrying excessive inventory due to supply uncertainty
- Emergency situations requiring expensive air freight for critical materials
- Limited customization options from offshore suppliers
- Lack of responsive technical support for complex applications

The Opportunity:

Western Canada needs a reliable, local manufacturer of high-quality welding materials to support the region's energy, infrastructure, and manufacturing sectors.

Market Problem Quantification

Impact Area	Current State	Cost to Industry
Lead Times	6-8 weeks average	\$50M+ in carrying costs
Supply Disruptions	15+ incidents in 2023	\$25M+ in project delays
Emergency Supply	20% price premium	\$15M+ in emergency costs
Quality Issues	5-8% reject rates	\$10M+ in rework costs

The FluxGen Solution

Local Manufacturing Excellence for Western Canada

Our Solution:

FluxGen Industries establishes state-of-the-art SAW flux manufacturing in Airdrie, Alberta, providing local supply, superior quality, and responsive service to Western Canadian markets.

Value Proposition:

- **Local Supply:** 1-2 week delivery vs. 6-8 weeks from imports
- **Superior Quality:** Consistent, certified products meeting AWS standards
- **Technical Support:** Local application engineering and customer support
- **Competitive Pricing:** Eliminate import markups and transportation costs
- **Custom Solutions:** Flexible manufacturing for specific customer requirements
- **Supply Reliability:** Reduced risk of supply chain disruptions

Competitive Advantages:

- Strategic location in Calgary-Edmonton industrial corridor
- Canadian content supporting government procurement preferences
- Experienced management team with industry relationships
- Scalable manufacturing platform for growth
- 80-90% Canadian raw material sourcing

Customer Value Proposition

Benefit Category	Customer Value	Competitive Advantage
Delivery Speed	75% faster delivery	Local manufacturing & logistics
Technical Support	24-hour response time	Local application engineers
Product Quality	99.5%+ consistency	Advanced quality control systems
Cost Savings	10-15% total cost reduction	Eliminate import markups
Supply Security	99% availability target	Local inventory & production

Massive Market Opportunity

\$150M+ Addressable Market in Western Canada

Market Size & Growth:

- Total Addressable Market: CAD \$150-200 million annually
- Annual Growth Rate: 4.1% driven by infrastructure and energy projects
- Import Dependency: 80%+ creating local manufacturer opportunity
- Market Expansion: Additional \$200M+ in central Canada and northern US

Key Market Drivers:

- \$180+ billion federal infrastructure investment program
- Major pipeline projects (TMX, Coastal GasLink expansions)
- Oil & gas facility maintenance and expansion
- Manufacturing sector growth and reshoring trends
- Government emphasis on supply chain localization

Market Segment Analysis

Market Segment	Size (CAD)	Growth Rate	FluxGen Opportunity
Oil & Gas	\$60 million	5.2%	High - Local advantage
Infrastructure	\$45 million	4.8%	High - Government spending
Manufacturing	\$30 million	3.5%	Medium - Diverse needs
Marine & Offshore	\$15 million	2.8%	Medium - Specialized
Total Market	\$150 million	4.1%	Target 3-5% share

Market Penetration Strategy:

- Year 1: Capture 0.5% market share (\$0.75M revenue)
- Year 3: Achieve 3.5% market share (\$5.8M revenue)
- Year 5: Target 6.0% market share (\$11.6M revenue)

Conservative Growth Assumptions: Our projections assume capturing only 3-6% of the addressable market, leaving significant room for growth and market expansion.

Product Portfolio & Quality

Comprehensive SAW Flux Product Line

Core Product Categories:

- **Basic Flux (F6XX Series):** General structural welding applications
- **Low Hydrogen Flux (F7XX Series):** Pressure vessels and critical structures
- **Neutral Flux:** Multi-pass welding and build-up operations
- **Specialty Alloys:** Custom formulations for specific applications

Quality Standards & Certifications:

- AWS A5.17 & A5.23 specifications compliance
- CWB (Canadian Welding Bureau) approvals
- ISO 9001:2015 quality management system
- Full traceability and batch documentation
- Rigorous testing: chemical, mechanical, and performance

Product Examples

Product	Application	Key Benefits
FeCr	Stainless and hardfacing flux	High quality, local supply, technical support
FeCrC	Hardfacing and wear-resistant flux	High quality, local supply, technical support
FeMn	SAW flux deoxidizer and alloying	High quality, local supply, technical support
FeMo	High-temperature steel welding	High quality, local supply, technical support

Manufacturing Excellence:

- Advanced blending and agglomeration processes
- Automated quality control and testing systems
- Statistical process control for consistency
- Continuous improvement and lean manufacturing
- Environmental compliance and sustainability focus

Customer Support:

- Local application engineering support
- Welding procedure development assistance
- Technical training and education programs
- 24/7 emergency supply capability
- Custom formulation development services

Scalable Business Model

Phased Growth Strategy with Strong Unit Economics

Three-Phase Development Plan:

Phased Development Strategy

Phase	Capacity (kg/month)	Revenue Target	Key Focus
Phase 1 - Pilot	60,000	TBD	80% Western Canada suppliers
Phase 2 - Scale	180,000	TBD	85% North America suppliers
Phase 3 - Expansion	320,000	TBD	85% NA + strategic imports

Revenue Model:

- Direct sales to large customers (70% of revenue)
- Distributor partnerships for smaller customers (20% of revenue)
- Online sales and emergency orders (10% of revenue)

Target Margins:

- Gross Margin: 35-45% (improving with scale)
- EBITDA Margin: 25-30% at full scale
- Strong cash flow generation for self-funded growth

Competitive Positioning:

- Premium quality with competitive pricing
- Local supply advantage vs. imports
- Superior service vs. large manufacturers
- Technical expertise vs. distributors

Scalability Factors:

- Modular production system for capacity expansion
- Proven processes and quality systems
- Established customer relationships and market presence
- Management team with scaling experience

Progress & Milestones

Strong Foundation & Execution Progress

Completed Milestones:

- Market research and customer validation completed
- Management team assembled with relevant experience
- Technology and process design finalized
- Supplier relationships established with Canadian sources
- Site selection criteria developed for Airdrie location
- Financial projections and business plan completed

Current Activities:

- Government funding program applications in progress
- Equipment vendor selection and quote process
- Site visits and lease/purchase negotiations
- Initial customer discussions and letters of intent
- Regulatory compliance planning and permit preparation

Implementation Timeline

Milestone	Target Date	Status	Success Criteria
Team Assembly	Completed	Done ✓	Key roles filled
Business Plan	Completed	Done ✓	Comprehensive plan ready
Funding Secured	Month 3	In Progress	\$200K+ secured
Site Selection	Month 4	In Progress	Lease signed
Equipment Ordered	Month 5	Planned	Major equipment contracts
Permits Obtained	Month 8	Planned	All permits approved
Facility Buildout	Month 10	Planned	Construction complete
Production Start	Month 12	Planned	First product shipped
Customer Trials	Month 14	Planned	3+ customers qualified
Full Production	Month 18	Planned	500+ kg/month capacity

Market Validation:

- Customer interviews confirming demand and pricing
- Supplier meetings validating cost and availability
- Industry expert validation of market opportunity

- Government support for local manufacturing initiatives

Risk Mitigation:

- Conservative financial projections with multiple scenarios
- Experienced team with relevant industry background
- Phased approach minimizing initial investment
- Multiple customer segments reducing concentration risk

Experienced Management Team

Industry Experience + Proven Track Record

The FluxGen management team combines deep industry knowledge with proven execution capability in manufacturing and business development.

Management Team

Name	Role	Key Experience	Value to FluxGen
Pratik Jhaveri	Managing Director	15+ years executive leadership, manufacturing scale-up	Strategic leadership, stakeholder management, business development
Arpan Patel	Operations Director	12+ years manufacturing operations, quality systems	Manufacturing excellence, quality assurance, operational efficiency
Abhishek Patel	Supply Chain Director	10+ years procurement, logistics, vendor management	Cost optimization, supplier relationships, inventory management
Bhargav Patel	Quality and Compliance Director	8+ years relevant experience	Industry expertise and execution capability

Team Strengths:

- Collective 40+ years of manufacturing and business experience
- Proven track record in scaling industrial operations
- Deep relationships with suppliers, customers, and industry partners
- Complementary skill sets covering all critical business functions
- Commitment to operational excellence and customer satisfaction

Advisory Support:

- Industry advisory board with welding technology experts
- Business advisors with manufacturing and financial expertise
- Customer advisory panel providing market feedback
- Government relations support for regulatory compliance

Future Hiring:

- Production team: experienced operators and technicians
- Quality control: certified lab technicians and inspectors
- Sales team: industry relationships and technical sales experience
- Administration: accounting, HR, and customer service support

Strong Financial Projections

Path to Profitability with Strong Returns

Investment Highlights:

- Total CAPEX Investment: CAD \$3,340,000.00
- Break-even: Month 18-24 of operations
- 5-Year Revenue Target: \$3.5-5.0 million annually
- Target EBITDA Margin: 25-30% at scale
- Projected ROI: 25-35% by Year 3

5-Year Financial Projections

Metric	Year 1	Year 2	Year 3	Year 5
Revenue	\$200K	\$800K	\$1.8M	\$3.2M
Gross Margin	20%	32%	35%	37%
EBITDA	(\$34K)	\$140K	\$424K	\$870K
EBITDA Margin	(17%)	18%	25%	27%
Production (kg/month)	500	2,000	4,000	6,000
Customers	3-5	8-12	15-20	25+
Employees	8-12	15-18	20-25	25-30

Key Financial Assumptions:

- Conservative market penetration (3-6% of addressable market)
- Competitive pricing with 5-15% local supply premium
- Gross margins improving with scale and operational efficiency
- Working capital maintained at 12-15% of revenue

Cash Flow & Returns:

- Positive cash flow by Year 2
- Self-funding capability by Year 3
- Strong ROI for investors with multiple exit options
- Dividend potential beginning Year 4

Sensitivity Analysis:

- Break-even achievable even with 15% lower volumes
- Price sensitivity of 10% impacts EBITDA by 15-20%
- Multiple scenarios validate robust financial performance

Competitive Landscape

Favorable Competitive Position

Current Market Structure:

- Global manufacturers (Lincoln Electric, ESAB): 45% market share
- Regional distributors: 30% market share
- Asian imports: 20% market share
- Local manufacturers: 5% market share ← FluxGen opportunity

Competitive Analysis

Competitor Type	Strengths	Weaknesses	FluxGen Advantage
Global Manufacturers	Brand recognition, R&D;	High prices, slow delivery	Local supply, competitive pricing
Regional Distributors	Relationships, inventory	No manufacturing control	Quality control, direct sales
Asian Imports	Low cost, high volume	Quality issues, long lead times	Superior quality, fast delivery
Existing Local	Local presence	Limited capacity, old technology	Modern facility, scalable processes

Competitive Strategy:

- **vs. Global Manufacturers:** Compete on speed, service, and local presence
- **vs. Distributors:** Direct relationships and superior technical support
- **vs. Imports:** Quality, reliability, and responsive customer service
- **vs. Local Competitors:** Modern technology and scalable operations

Sustainable Advantages:

- Local manufacturing reducing lead times by 75%
- Technical support with 24-hour response capability
- Custom formulation flexibility for specific applications
- Canadian content supporting government procurement
- Strong supplier relationships ensuring cost competitiveness

Barriers to Entry:

- Significant capital investment requirements (\$200K+ initial investment)
- Technical expertise and industry certifications
- Customer relationships and trust building
- Regulatory compliance and permit requirements

Go-to-Market Strategy

Multi-Channel Approach with Direct Sales Focus

Phase 1: Market Entry (Months 1-12)

- Target: 3-5 pilot customers in Alberta
- Approach: Direct sales with intensive technical support
- Focus: Product validation and quality demonstration
- Goal: \$0.75M revenue, proof of concept

Phase 2: Market Development (Months 13-24)

- Target: 10-15 active customers across Alberta/Saskatchewan
- Approach: Direct sales + selective distributor partnerships
- Focus: Market penetration and capacity scaling
- Goal: \$3.1M revenue, operational efficiency

Phase 3: Regional Expansion (Months 25+)

- Target: Western Canada market leadership
- Approach: Multi-channel distribution strategy
- Focus: Geographic expansion and full product portfolio
- Goal: \$5.8M+ revenue, sustainable profitability

Sales Channel Strategy

Sales Channel	Target Customers	Value Proposition	Revenue %
Direct Sales	Large fabricators, contractors	Full service, technical support	70%
Distributor Partners	Small-medium manufacturers	Local inventory, relationships	20%
Online/Emergency	Maintenance, urgent needs	Fast delivery, availability	10%

Customer Acquisition Strategy:

- **Direct Outreach:** Target top 50 potential customers with direct sales
- **Industry Events:** Trade shows, technical conferences, and industry meetings
- **Referral Program:** Incentives for customer referrals and testimonials
- **Technical Leadership:** Thought leadership through technical publications
- **Government Relations:** Leverage Canadian content preferences

Key Success Metrics:

- Customer acquisition: 5-10 new customers annually
- Average deal size: \$50K-\$200K annually per customer
- Customer retention: 90%+ annual retention rate
- Sales cycle: 3-6 months average from lead to first order
- Win rate: 60%+ for qualified opportunities

Investment Opportunity

Seeking \$200K-\$300K Series A Investment

The Ask:

- Total Funding Requirement: CAD \$200,000-\$300,000
- Investment Type: Equity or convertible preferred shares
- Use Period: 18-24 months to achieve cash flow positive
- Investor Profile: Strategic investors or experienced angels

Funding Sources Strategy

Funding Source	Amount Range	Terms	Probability
Founder Investment	\$50K-\$75K	Equity	Committed
Angel Investors	\$75K-\$125K	Equity/Convertible	High
Government Grants	\$25K-\$100K	Grant/Loan	Medium
Equipment Financing	\$40K-\$80K	Secured Loan	High
Strategic Partners	\$100K-\$200K	Equity/Revenue Share	Medium

Investor Value Proposition:

- **Market Opportunity:** \$150M+ addressable market with 4.1% annual growth
- **Competitive Advantage:** First-mover advantage in local manufacturing
- **Strong Returns:** Target IRR of 25-35% for equity investors
- **Scalable Model:** Proven processes with expansion potential
- **Experienced Team:** Management with track record of success

Exit Opportunities:

- Strategic acquisition by global welding materials company
- Management buyout funded by strong cash flows
- Private equity rollup of regional manufacturers
- Dividend recapitalization after achieving scale

Risk Mitigation:

- Phased investment approach with performance milestones
- Conservative financial projections with upside potential
- Diversified customer base and market segments
- Asset-backed investment with tangible equipment value

Use of Investment Funds

Strategic Allocation for Maximum Impact

Investment funds will be allocated to achieve operational milestones and position FluxGen for sustainable growth and profitability.

Investment Fund Allocation

Category	Amount	Percentage	Purpose
Equipment & Machinery	\$120K-\$180K	60%	Production equipment, installation, commissioning
Facility & Infrastructure	\$40K-\$60K	20%	Building lease/purchase, utilities, site preparation
Working Capital	\$30K-\$45K	15%	Initial inventory, operating expenses, cash flow
Marketing & Business Dev	\$10K-\$15K	5%	Customer acquisition, trade shows, marketing materials

Fund Deployment Timeline:

- Months 1-3: Equipment deposits and facility preparation (40%)
- Months 4-8: Equipment delivery and installation (35%)
- Months 9-12: Working capital and operational ramp-up (20%)
- Months 13+: Marketing and business development (5%)

Milestone-Based Investment:

- Tranche 1 (\$100K): Site secured, equipment ordered
- Tranche 2 (\$100K): Equipment installed, permits obtained
- Tranche 3 (\$50K+): Production trials successful, first customer orders

ROI Acceleration:

- Faster time to market with adequate funding
- Higher quality equipment improving efficiency and margins
- Professional marketing accelerating customer acquisition
- Working capital supporting larger customer orders

Alternative Scenario: With minimum funding (\$150K), FluxGen can achieve break-even but with longer timeline and reduced market penetration speed.

Next Steps & Contact Information

Ready to Move Forward

Contact Information:

FluxGen Industries Ltd.

Location: Airdrie, Alberta

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Key Team Contacts

Name	Role	Contact Information
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Abhishek Patel	Supply Chain Director	abhishek.patel@fluxgenindustries.ca +1 587 578 3883

Immediate Next Steps:

- Due diligence package available upon request
- Facility site visits and equipment demonstrations
- Customer reference calls and market validation
- Financial model review and sensitivity analysis
- Investment term sheet and legal documentation

Timeline for Investment Decision:

- Initial discussion and interest confirmation: 1-2 weeks
- Due diligence and documentation review: 2-4 weeks
- Final investment decision and legal closure: 2-3 weeks
- Target funding completion: 6-8 weeks from initial contact

Ready to Partner: FluxGen Industries represents a compelling investment opportunity in Western Canada's growing industrial manufacturing sector. We're seeking strategic partners who share our vision of building a leading regional manufacturer.

Thank you for your consideration. We look forward to discussing this opportunity.