Strategic Science Fund:

2024-2025 Annual Report

Composites Knowledge Network

Date of Board of Director Approval: July 14, 2025











Objectives Advanced and Progress Towards Achieving Expected Results

In 2024-25, the Composites Knowledge Network (CKN) delivered measurable progress toward its SSF-funded objectives, advancing national knowledge mobilization, workforce training, stakeholder engagement, and partnerships across Canada's composites manufacturing sector. The year was marked by continued growth of the Knowledge in Practice Centre (KPC), expanded delivery of AIM learning events, results from a national industry survey, and structured engagement with regional nodes to broaden participation in content development and dissemination.

Knowledge in Practice Centre (KPC)

The KPC continued to serve as a nationally recognized digital resource for sharing validated knowledge on composite materials and processes.

- More than **50 new KPC pages** were published, exceeding targets and covering topics such as composite testing, processing, tooling selection, and automation.
- These new resources were guided in part by the 2024 Industry Survey, which emphasized a growing demand for practical, applied training resources.
- Content remained organized using a structured architecture that facilitates learner progression from foundational knowledge to advanced case studies.
- A new **EDI module** was also introduced, reflecting CKN's commitment to inclusive knowledge systems.

The KPC saw over **6,000 visitors per quarter**, with sustained growth in international traffic and balanced engagement from both industry and academia.

AIM Learning Events

CKN significantly expanded its delivery of AIM (Application + Impact) events throughout the year.

- A total of **11 AIM events** were delivered in 2024–25, exceeding expectations and representing a broad spectrum of technical topics. These covered areas such as composite repair, bolted joints, NDT, QA/QC, filament winding, thermoset curing, and sector-specific applications.
- The events were designed to meet emerging and persistent industry needs, drawing directly from insights provided in the national survey.
- Each session was recorded and integrated into the KPC to enable continued access and cumulative learning.

The volume and diversity of this year's AIM programming reflect both the sector's priorities and CKN's growing capacity to serve as a national provider of practical composite knowledge.

Community Engagement

CKN strengthened its engagement with stakeholders across Canada:

• The **2024 national industry survey**, conducted in both official languages, gathered input from 63 companies across most provinces.











- Respondents identified priorities including workforce development, production capacity, and better knowledge transfer mechanisms—areas directly addressed by KPC and AIM activities.
- The survey revealed a new generation of staff entering the composites sector, with only one-third having used the KPC in the past year. This underscores an opportunity to deepen awareness and usage of CKN's digital resources.

Board of Directors & Senior Management

CKN's governance and management teams ensured programmatic oversight, resource alignment, and operational adaptability:

- The Board supported risk mitigation efforts related to staffing and partner ramp-up, enabling efficient allocation of SSF resources.
- Operational deliverables were tracked against the Corporate Plan, with no risk of fund lapse and readiness to scale if additional resources became available.

Partnerships

CKN deepened its partnerships with national stakeholders across academia, industry, and government:

- A more structured approach to node engagement was initiated this year, encouraging regional collaborators to contribute to the expansion of the KPC and participate in AIM event learning activities.
- This effort enhances geographic diversity, supports topic specialization, and promotes long-term sustainability by distributing content development and expertise across the network.

Cross-Cutting: Equity, Diversity, and Inclusion (EDI)

EDI continued to be integrated across all of CKN's operations:

- Two **EDI-focused webinars** were delivered this year, exploring inclusive employment practices for neurodivergent individuals and the use of disability adjustments as tools for research quality improvement.
- EDI-focused content was added to the KPC, and metrics on participation and engagement were tracked to inform future activities.

These efforts reflect CKN's commitment to supporting an inclusive innovation ecosystem.

Summary

CKN achieved strong outcomes across its SSF-funded objectives in FY2024–25, supported by high engagement, partner collaboration, and evidence-based programming. Major accomplishments included:

- Expansion of the **KPC** and alignment of content with industry-defined needs
- Delivery of a robust calendar of **AIM events** across technical and applied topics
- Completion of a **national industry survey**, guiding future planning
- Strategic partnership growth and distributed engagement through regional nodes
- Continued focus on **EDI** as an integral part of knowledge dissemination

These initiatives demonstrate CKN's value as a national knowledge mobilization leader and its capacity to support Canada's composites sector through inclusive, applied, and scalable programming.











Activities Undertaken

During 2024–25, CKN delivered a wide range of activities aligned with its SSF-funded objectives, focusing on knowledge mobilization, workforce training, community engagement, and partnership development in support of Canada's composites manufacturing sector.

Knowledge Mobilization and KPC Expansion

CKN continued to develop and maintain the Knowledge in Practice Centre (KPC), an openaccess, online repository of curated knowledge. The KPC offers something exceptional to small and medium enterprises (SMEs) in particular: direct access to world-class composites knowledge, best practices and latest technologies. This integrated technical resource supports all levels of the composites industry; from novices interested in acquiring foundational knowledge, to experienced manufacturers looking to update or optimize their processes and methods for new product development. Over 50 new KPC pages were published in 2024-25, incorporating foundational principles, process-specific knowledge, testing procedures, and applied case studies. These resources were informed by the 2024 industry survey and partner consultations, ensuring alignment with real-world needs.

All KPC content is available in both official languages through auto-translation and curated bilingual summaries, supporting access by Francophone users. Analytics indicate that Frenchlanguage access (fr-ca) ranked among the top 10 language groups. Currently, the KPC has over 240 articles of technical content, which can be viewed in English, French, Japanese and various other languages. CKN's structured page architecture and auto-translation support make it a reliable, multilingual knowledge platform.

Training and AIM Events

CKN delivered 11 AIM learning events in 2024-25, offering practical instruction on composite repair, NDT, quality assurance, bolted joints, viscoelasticity, and other specialized topics. These webinars were delivered in English, with follow-up communications and archived summaries made available in both English and French through the KPC. Each AIM event was recorded and integrated into the KPC alongside relevant articles, forming a cohesive, ongoing learning pathway.

Many events addressed core challenges raised in the national survey, including workforce development, technical upskilling, and emerging equipment and automation needs. Events were free to access and widely attended by SMEs, academic institutions, and early-career professionals.

Community Engagement and Outreach

A major initiative this year was the bilingual national industry survey, which gathered input from 63 companies across nearly all provinces. Respondents represented a range of organization sizes, sectors, and technical capabilities. Feedback from this survey directly informed the prioritization of KPC content and AIM event topics for the coming year.

Web analytics show that over 6,000 users engaged with the KPC each quarter during 2024-25. Between April 1, 2024, and March 31, 2025, visitors from over 150 countries (19 new countries)







accessed the platform, with the United States, Canada, India, and the United Kingdom as the top user locations. Notably, engagement from within Canada remains strong across provinces, confirming national relevance, while international interest highlights the broader utility of CKN's technical knowledge. The KPC continues to support multilingual access, with usage recorded in a range of languages. While English (en-us) is the dominant access language, French (fr-ca) also appears among the top-used languages, validating the importance of bilingual accessibility for Canadian users.

CKN also hosted two EDI-focused Coffee Breaks to engage underrepresented voices and promote inclusion in science and industry. These events addressed inclusive employment practices and equity in research environments.

Together, these efforts underscore CKN's commitment to accessible, community-driven knowledge sharing across Canada's composites ecosystem.

Partnerships and Node Engagement

CKN initiated a **structured node engagement approach** to increase regional participation in knowledge development and dissemination. Regional collaborators from academia and industry were encouraged to propose contributions to the KPC and participate in knowledge-sharing activities such as AIM learning events. This approach supports geographic diversity, deeper community ownership, and long-term sustainability of the knowledge base.

Collaborations helped support AIM co-delivery, develop new KPC resources, and build awareness of the KPC within under-served areas.

Language Accessibility and Official Language Minority Communities

All core activities were supported by bilingual communications, with web content, surveys, and event materials provided in both official languages. KPC articles are presented in English and translated using an integrated bilingual delivery system, including French-language summaries and keyword tagging to support searchability. While AIM events were delivered in English, materials were disseminated in French post-event.

CKN's bilingual content is regularly accessed by users in Quebec and other Francophone communities. This access contributes to composites science knowledge dissemination in French. KPC resources and AIM recordings have been used by educators and students at the post-secondary level—including in French-language institutions—supporting broader knowledge accessibility across language groups.

Deviations and Mitigation

CKN's activities were largely delivered as planned. Minor deviations related to partner ramp-up and node onboarding timelines were addressed through adaptive planning and prioritization of responsive partners. A few planned in-person engagements were replaced or delayed in favour of digital interactions due to budget constraints. These adjustments did not affect deliverables or outcomes and are expected to normalize in 2025-26.











Financial Performance

In 2024-25, the Composites Knowledge Network (CKN) received \$500,000 from the Strategic Science Fund (SSF), consistent with the corporate plan submitted for Year 1. Funds were spent across SSF-eligible categories in alignment with program guidelines, supporting a wide range of activities that advanced CKN's mandate and strategic objectives. CKN had an approved carryover amount of \$48,447.47.

Use of SSF Funds by Cost Category

Knowledge Mobilization / Tech Transfer

Total: \$213,952.83 (47%)

Activities included the development of Knowledge in Practice Centre (KPC) content, hosting 11 AIM events, delivery of technical webinars, and Coffee Breaks focused on EDI and inclusive practices in STEM. This category also covered translation, editing, platform maintenance, and public-facing resource development.

Networking

Total: \$170,655.06 (38%)

Eligible activities included structured node engagement across Canada, coordination of the National Industry Survey, participation in external conferences, and stakeholder engagement workshops. Funding supported inclusive outreach and regional knowledge transfer.

Operational Costs

Total: \$66,944.64 (15%)

Expenses covered administrative support, legal consultation related to IP management, and platform hosting and analytics infrastructure.

CKN confirms that remuneration costs paid with SSF funds did not exceed the Full-Time Equivalent (FTE) rates for public service employees. Any compensation above those rates was covered by non-SSF funding sources.

Matched Contributions

In 2024-25, CKN secured over \$485,000 in new, incremental contributions (cash and in-kind) from post-secondary, industry and academic partners that directly supported SSF-eligible activities. These matched contributions would not have been available without the SSF award.

Distribution of Funds and Other Considerations

- No SSF funds were distributed to Ultimate Recipients during this reporting period. All activities were executed centrally by CKN or in collaboration with engaged contributors and institutions.
- No significant deviations from the corporate plan occurred. Any minor underspending in specific line items was offset by reinvestment in additional content development and stakeholder outreach.
- No interest was earned on SSF funds in this fiscal year.
- No new federal funding beyond the SSF contribution was received during this period.











Policies, Standards and Procedures

CKN continues to maintain and update internal policies and procedures to ensure alignment with Section 2.11 and Appendix E of the SSF Program Guide.

General Policy Updates

In 2024-25, CKN conducted an internal review of its governance and administrative procedures to ensure full compliance with SSF requirements. Updates were made related to:

- Research security, including onboarding procedures and affiliation disclosures (aligned with the submitted Research Security Plan); and
- **Intellectual property management**, ensuring consistent contributor agreements and public licensing aligned with the Government of Canada's rights.

CKN confirms that no funds are invested and that all SSF contributions are held in operating accounts dedicated to eligible project costs, in line with Appendix E.

Travel and Hospitality

Travel and Hospitality: Information to support the one-time verification

1. Method to Evaluate Travel Costs

Travel is approved only when aligned to advance CKN objectives, such as participating in conferences to promote knowledge exchange or supporting in-person engagement with partners where virtual alternatives are not feasible. Each request is evaluated based on relevance to SSF goals, potential impact, and availability of virtual substitutes.

2. Policy Development and Implementation

CKN has a formal Travel and Hospitality Policy, which is currently implemented and administered by the Managing Director.

3. Approval

The policy has been approved by the CKN Board of Directors. Updates follow internal processes, including delegation to the Managing Director for operational oversight.

4. Policy Applicability

The policy applies to CKN staff, Board members and subcontractors.

5. Consistency with Directives

CKN confirms that the policy is fully consistent with the principles of the National Joint Council Travel Directive and the Treasury Board Directive on Travel, Hospitality, Conference and Event Expenditures (THCEE), including requirements for cost-efficiency, justification, and documentation.

Travel and Hospitality: Information to support the annual verification

1. Plan Approval

A 2024-25 Travel and Hospitality Plan was developed and approved by the Board of Directors. All proposed travel is reviewed by the Managing Director and documented through The University of British Columbia's (UBC – host institution) financial approval channels.

2. Information Included in the Plan

The plan includes travel for participation in knowledge dissemination events (e.g.,











composites industry conferences) and partner engagement and node coordination. For each trip, the plan outlines the purpose, location, dates, and justification relative to SSF objectives.

Results of Audits and Evaluations

During the 2024-25 fiscal year, no third-party program evaluations were conducted; however, an annual (2024-25) financial audit led by Walsh King LLP is currently underway. This audit includes review of all SSF-funded expenditures and is part of CKN's commitment to financial accountability and compliance. CKN will incorporate any recommendations from the Walsh King audit into future planning and reporting.

CKN is hosted by The University of British Columbia (UBC) and operates under UBC's financial policies and procedures. As such, CKN's financial activities are subject to regular internal reviews and oversight under UBC's governance framework, ensuring alignment with institutional standards and practices.

On a quarterly basis, CKN also conducted its own internal financial reviews, which confirmed:

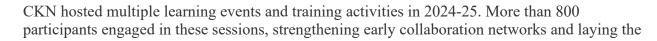
- SSF expenditures were aligned with the approved corporate plan and eligible cost categories;
- Expenses were compliant with SSF guidelines; and
- Partner matching contributions were appropriately documented.

Annual Statistical Information (SSF-defined metrics)

The 2024-2025 reporting period marked the first year of delivery under the Strategic Science Fund (SSF) framework for the Composites Knowledge Network (CKN).

Performance results demonstrate significant progress toward program objectives in training, knowledge dissemination, and industry engagement. Year 1 indicators confirm active implementation of learning events, resource distribution through the Knowledge in Practice Centre (KPC), and measurable participation across national and international user groups.

Program Indicators (2024-25)	Year 1 Result
Number of participants in live learning events	814
Number of hours of learning events delivered	13
Number of new partnerships supported	4
Number of KPC articles published	49
Number of visitors to the KPC in 2024-25	24,638
Increase in the number of visitors to the KPC	6,205
Number of educators using the KPC as a learning resource	4 (2 new)
Number of new companies enhanced as a result of activities	5









foundation for continued knowledge exchange. CKN achieved wide dissemination of program outputs, producing almost 50 specialized publications and recording thousands of uptake instances. Early evidence of long-term benefit is emerging. Five new companies reported direct improvement or enhancement as a result of CKN initiatives, demonstrating clear industrial and workforce impact even within the program's first operational year.

Recipient Objectives (2024-25)	Year 1 Result
New Canadian End Users	555
New International End Users	5,335
KPC Online Repository Articles	49
KPC Repository Returning Visitors	16 %
New Webinar Recording viewers	1,153
New Countries Reached by Training Events	19
Industry Survey Participants	71
Stakeholders Using Materials for Teaching/Training	2

The Knowledge in Practice Centre (KPC) continued to expand its reach with almost 25,000 KPC visitors (5,800 new) worldwide in 2024-25. The platform published 49 new online articles and welcomed 1,153 new webinar recording viewers, engaging participants from 19 new countries. Industry feedback and teaching adoption demonstrate strong early-stage knowledge mobilization and practical application of CKN resources.









