







Future Centre des Skills Compétences Centre futures





























The Future Skills Centre (FSC) is a forward-thinking centre for research and collaboration dedicated to preparing Canadians for employment success. We believe Canadians should feel confident about the skills they have to succeed in a changing workforce. As a pan-Canadian community, we are collaborating to rigorously identify, test, measure, and share innovative approaches to assessing and developing the skills Canadians need to thrive in the days and years ahead. The Future Skills Centre was founded by a consortium whose members are Toronto Metropolitan University, Blueprint ADE, and The Conference Board of Canada, and is funded by the Government of Canada's Future Skills Program.

The Workplace Innovation Network for Canada, a B.C.-based non-profit company, collaborates with workplace and higher education partners to advance workplace innovation capability in Canada. Workplace innovation is the employee-led social process of creating lasting value by mobilizing new ideas in their workplace. WINCan supports workplace partners in broadening their employee participation in innovation, to improve both organizational performance and quality of work life. In parallel, WINCan supports higher education partners with learning resources and activities, to develop students' capability as innovation enablers in Canada&'s workplaces.

WEtech Alliance, an Ontario Regional Innovation Centre, has served as a catalyst for technology and innovation in the Windsor-Essex and Chatham-Kent regions since 2011. We're a non-profit organization helping our regional workplaces to build dynamic innovation cultures, bring new ideas to market, and scale up to the next level of their growth. Our services to innovators, companies, entrepreneurs and intrapreneurs include training, IP and commercialization support, mentorship and strategic connections Learn more at www.wetech-alliance.com.

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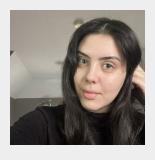
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## **Executive summary**

Although workplace innovation and quality of work is a developing area of investigation for Canada, our international colleagues have explored the interactions between these areas for more than a decade. European governments have deployed this research in policies and programs to improve quality of work for employees and to deliver better economic and social outcomes.

This applied research project focuses on adapting insights from Europe into multiple Canadian contexts, to determine the applicability of the strategies and activities for scaling across the country. Enhanced organizational processes and culture are also needed to enable, encourage, support, recognize and leverage inclusive employee-led innovation.

#### Two key research questions guided the initial project planning:

- How can Canada's workplaces and workforce adapt research advances from Europe to improve quality of work through employee-led workplace innovation for the Canadian context?
- 2. What European policy and program initiatives should be explored to guide our Canadian initiatives to scale-up employee workplace innovation for quality of work?

## During the project, another question emerged for innovation in Canadian workplaces:

3. How can we ensure that Canadian workplace innovation efforts focus intentionally on inclusive workplace innovation?

Eight organizations participated as field test sites for research adaptation. Of these, five were workplace partners who sought to use the adapted research to advance workplace innovation and quality of work in their organizations: a private training institute (Newfoundland and Labrador); health care network and a municipal utility (Ontario); an engineering services company (Alberta); and a forestry products company (British Columbia).

The other three organizations participating – the WEtech Alliance regional innovation centre (Ontario), the Newfoundland and Labrador



Employeeled workplace innovation is the social process of mobilizing new ideas to create better work, improving both organizational performance and quality of work. Workforce Innovation Centre, and Electricity Human Resources Canada. These organizations acted as our network hub partners seeking to apply the adapted research with their member organization networks at a regional or professional work domain level.

As a result of our research adaptation project, the workplace and network hub partners that have collaborated for this study targeted specific employee, team and organizational innovation capabilities. Using European (and some Canadian) research, the workplace partners collaborated with us to adapt the exemplary practices for their own contexts, thereby invigorating their organizations with new insights. In parallel, our network hub partners identified new opportunities to scale these new practices across their member networks. Given the breadth of industry, sector and geography of the participating partners, our findings indicate that scalability across Canada is possible and that we can adapt and extend insights from Europe to advance quality of work across multiple sectors and contexts in Canada.

Throughout the project, we observed the advantages of better integration of high-level policy goals for innovation performance and quality of work. We also identified two challenges to be addressed if we are to fully leverage research insights and exemplary practice to advance workplace innovation in our Canadian workforce contexts:

- Improving scalability for research-to-practice initiatives with individual workplace partners;
- Focusing responsibility to lead ongoing multi-sector collaboration in workplace innovation.

Both issues are explored further in our final Implications and Future Directions section. For example, we outline one promising approach to make the process of research adaptation more scalable, involving design and pilot testing of knowledge translation activities by senior undergraduate students as part of work-integrated learning placements with interested regional workplace partners, supported by both higher education teaching and research. We also outline an ongoing regional collaboration structure as one promising approach to develop a focal point of responsibility for on-the-ground support of research-to-practice knowledge mobilization and capability development to advance workplace innovation. Two current network hub partners – the NL Workforce Development Centre and the WEtech Alliance regional innovation centre in Windsor/Essex (Ontario), – have agreed to explore pilot studies of such approaches with their related regional workforce development collaboratives as testbed hubs for such cross-sector activities using adaptations of the European Living Labs collaboration model.

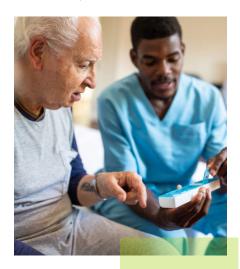
To conclude the Implications and Future Direction section, we also highlight the opportunity to emphasize inclusive workplace innovation in future Canadian exploration and deployment of workplace innovation for

quality of work. This would strengthen the internal links between organizational efforts in workplace innovation and in workplace inclusion, and could become a distinctively Canadian theme to complement research and development initiatives in Europe.

Supplementary Annexes provide more detail on these specific topics:

Annexes 1 and 2 – Research adaptation *Case Stories* by two participating workplace organizations.

Annex 3 – Highlights of Research on European Policies and Programs. This Annex is intended to guide further exploration by policy analysts and program planners regarding Research Question II above. We also note how we applied some of these insights ourselves in recommending future directions to follow up on this project.



## Introduction

A decade of European research and public policy initiatives on workplace innovation has provided extensive evidence that the social process of employee-led workplace innovation can improve both the quality of work life for employees and their organizations' performance on missions to advance economic and social well-being. Highlights of the ongoing recognition of workplace innovation at the European Union (EU) level appear in the box on the next page. Specific national and regional initiatives to advance workplace innovation appear throughout the report.

European governments have also begun to view workplace innovation as a competitive edge for economic and social success [Totterdill et al 2021]. For example, the Scottish government notes that "workplace innovation has the clear potential to benefit businesses, organizations and society, creating a focus on better use of organizational resources in ways that support the delivery of strategic and operational business objectives, improve the quality of work for employees and deliver better social outcomes in terms of health, participation and equality" [Scotland 2015]. Similarly, Finland has established a national goal to become the recognized international leader in workplace well-being and quality of work life by 2030, as declared in their national WORK2030 program [Finland 2023]. These workplace innovations focused on research-driven policies, programs and practices that are not yet widely understood or applied outside of the European context. Canada, however, is well-positioned to become a North American leader in leveraging employee-led workplace innovation.

Creating a more innovative workforce requires the development of new skills by individuals while enhancing organizational processes and practices to encourage, support, recognize and leverage inclusive employee-led innovation. For example, an inclusive culture for workplace innovation is a fundamental requirement that places responsibility with individuals and project teams to initiate and benefit from workplace innovation for quality of work.

#### **Inclusive Organizational Performance Goals**

Innovation has traditionally been expected to serve organizational goals around increased revenue, lower costs or improved client service. Our partners also sought to advance innovation for employee diversity, equity, inclusion and belonging, as described further below in our section on Inclusive Workplace Innovation.



# Three examples of the high-level recognition for employee-led workplace innovation in the EU:

### 2014: Defining features of workplace innovation

- Improves performance and working lives through inclusive dialogue and by creativity of employees
- Coalesces strategic knowledge of managers with hands-on, practical knowledge of frontline employees;
- Engages all stakeholders in the process of positive change, leading to win-win outcomes for creative convergence between enhanced organizational performance and enhanced quality of working life.
  - Workplace Innovation: concepts and indicators; EU Directorate-General for Enterprise and Industry

# 2019: Innovation in EU companies: Do workplace practices matter for employee-led innovation?

- Innovation is not just a technical process of developing or acquiring technology; innovation requires companies to support employee-led innovation activities, including progressive work organization.
- Innovation-enabling workplace practices are associated with innovation in companies...These
  practices seek to develop employees, give them autonomy in their work and include them in
  decision-making...enhancing capabilities for innovation should be a priority in implementation of the
  European Skills Agenda.
  - From research by the EU's Foundation for the Improvement of Living & Working Conditions (Eurofound),
     based on the 2019 European Company Survey data on workplace innovation in European companies.

# 2023: Bridges 5.0 – Towards a human-centred, sustainable and resilient economy

- The concept of Industry 4.0 has been driven primarily by productivity and technological considerations. The transformative vision for Industry 5.0 aims beyond efficiency and productivity as the sole goals for industry and places the well-being of the worker at the centre of the production process. [EC 2022]
- Our Industry 5.0 research program will develop a new form of co-operation targeting skills and their transformation, to accelerate the human-centred work design and innovation needed for Industry 5.0.
  - Workplace Innovation Europe project in the EU Horizon 2027 Research and Innovation Program

As a result of our research adaptation project, the workplaces that have collaborated for this study have targeted specific employee and organizational innovation capabilities. Using European (and some Canadian) research, the workplaces adapted the exemplary practices for their own contexts thereby invigorating their organizations with new insights. For example:

 The workplace innovation leaders of a municipally owned utility company in Ontario strove to integrate the company's stretch goals program for individual professional development with their internal design challenges program for workplace innovation teams.

- An engineering services company in Western Canada identified the goal of better understanding the factors affecting employees' motivation to engage in innovation in order to develop more effective innovation teamwork and a more supportive innovation culture.
- A workforce development centre in Eastern Canada sought to improve the quality of work life for older workers to enhance their job satisfaction and promote extended working lives, a goal shared by regional workplaces and the provincial government's economic strategy.

We identify two key research questions for this project and a new research question which emerged during the project. We explain the methodology used to address them in case studies with our workplace and network hub partner. The subsequent Research Results and Analysis section provides context and details about the research adaptation activities of our workplace and network hub partners. For example, the research adaptation process undertaken by our partners demonstrated the value of investigating a full range of workplace innovation goals, many of which they had not previously addressed by systematic organizational processes.

In the concluding *Implications and Future Directions* section, we highlight key opportunities and challenges for employee-led workplace innovation to become a scalable endeavour supporting quality of work in multiple industries and sectors across Canada. Together with two of our network hub partners, we have created a scenario for potential follow-up work in two regions with a wider range of collaborating stakeholders and new co-operative approaches.



## Research project overview

#### Primary research question and method

1. How can Canada's workplaces and workforce adapt research advances from Europe to improve quality of work through employee-led workplace innovation?

The primary research method selected to address this question was the creation of a set of case stories within specific Canadian organizations. Each case included the following steps:

- A preliminary discussion of the organization's current status and near-term goals regarding employee-led workplace innovation and quality of work
- Creation of brief research syntheses of relevant insights and evidence-based exemplary practices tailored to each workplace's individual context
- Selection of specific research insights deemed the most desirable, feasible and viable to advance the organization's goals and improve employees' quality of work by the organization's innovation managers, in collaboration with our research team members.
- Development of one or more adaptation scenarios to implement the insight or practice within the organization's innovation strategy. This step also often included consultation or feedback by our research
- Evaluation of the research-to-practice process, with the lesson learned from those evaluations described in the *Findings* section below and, where possible, implemented in later case stories within the research project.



Recruitment of a diverse set of workplace cases was facilitated by our four network hub partners, representing different types of workplace networks and regions across Canada:

- WEtech Alliance is a regional innovation centre in southwestern Ontario whose program of innovation catalysts has developed innovation capability for the automotive industry, the health care and energy sectors, and with young women leaders in human resources
- Centre for Digital Transformation at the British Columbia Institute of Technology in Burnaby, B.C., an interdisciplinary research-to-practice centre of expertise
- NL Workforce Innovation Centre, administered by the College of the North Atlancis and based at the Corner Brook NL campus, a provincially supported agency whose vision is to lead a sustainable and innovative workforce development ecosystem that accelerates economic growth and prosperity
- Electricity Human Resources Canada (EHRC), a national organization providing human resources
  products and services to Canada's electricity sector, including labour market information,
  competency frameworks and professional skills training.

Each network hub partner hosted an event for us to share information with potential case story workplaces. EHRC, NLWIC and WEtech Alliance also served as case story sites themselves.

#### Secondary research question and method

Given the key role of public policies and programs in fostering workplace innovation for quality of work in Europe, a secondary research question was included:

2. What European policy and program research insights should be explored further to guide our Canadian initiatives to foster workplace innovation for quality of work?

This research question was addressed by curating illustrative research insights from exemplary public policy and programs developed by the European Union, member countries and regions. We also highlighted some issues concerning public policy and programs where the Canadian context might be most likely to require significant change or adaptation. Given the specialized audience for this work, it has been structured as a briefing note on *Insights from European Research on Public Policy for Workplace Innovation and Quality of Work* (Annex 4).

In addition, our case stories with NLWIC and WEtech identified common challenges that needed to be addressed to scale-up and sustain research-informed workplace innovation for quality of work. That insight led us to focus some of our curation of European research specifically on promising new models to develop more comprehensive cross-sector regional collaborations. The resulting research evidence (reported in Annex 3) was the basis for specific recommendations on follow-up work to foster stakeholder co-operation in partnership with these two network hubs, listed in our final report section on Implications and *Future Directions*.

That concluding section summarizes how the proposed follow-on work will allow us to test adaptation of European work with cross-sector Living Labs collaboration models, and to enhance them to address our Canadian contexts and the specific challenges identified in our case stories. For example, we outline extended roles for higher education partners and for stakeholders in workforce well-being, including labour unions and organizations working to advance more inclusive workplaces.

#### An emerging research question

3. How can workplace innovation for quality of work be designed to intentionally support more diverse, inclusive and equitable workplaces?

During the project activities described above, several partners noted that their efforts to develop a more

innovative workforce should be natural allies of their efforts to promote greater diversity, equity and inclusion in the workforce. As just one example, we frequently hear from our industry partners the observation that increasing the diversity of ways of thinking and knowing within an innovation team can increase the likelihood of breakthrough innovations.

However, workplace strategies for employee-led innovation initiatives are not always explicitly inclusive, such as intentionally including members of equity-seeking groups. While the focus of our research project remains on workplace innovation for quality of work as encountered at the level of individual workplaces, we also recognize a potential opportunity to position workplace innovation in Canada in a way that promotes a broader understanding of Inclusive Innovation.



Research adaptation case stories and analysis results

As planned, eight organizations participated as field test sites for research adaptation in British Columbia, Alberta, Ontario, and Newfoundland. Of these, five are workplaces that used the adapted research directly to advance workplace innovation and quality of work. The remaining three are network hub partners supporting member organization networks and for whom research adaptation became more regionally or network focused.



#### Workplace case stories and analysis results

The five workplaces that participated in this project each joined with varying histories of their attempts to incorporate workplace innovation. Of them, four were deemed "successful" and one "partially successful" (see workplace snapshots, below). The research-to-practice process included creating scenarios of research adaptation that the workplace leaders reviewed to decide on further steps. Two of the workplaces took their organizational projects beyond our original scope, by securing executive approval for implementation of the adaptations into their workplace practices where they are now tracking results.<sup>1</sup>

Snapshots for each workplace case appear below, followed by an analysis of the overall findings. (Annexes 1 and 2 contain more in-depth case stories for the ENWIN and EngServ cases).

- 1. ENWIN is a municipally owned and operated energy and water services utility in southwestern Ontario. As an example of an organization that had already begun its workplace innovation journey, the research insights and adaptations shared the project team provided the organization with more critical awareness of the innovation initiatives that the organization had employed. The ENWIN team continued working with this scenario to implement the research-to-practice knowledge into company operations, as described in their full case story below (appended as Annex 1).
- 2. EngServ is an engineering services company based in Alberta that focuses on offering progressive solutions to complex challenges. The firm identified the need for strategies to encourage all employees to engage in the innovation opportunities provided by the firm. Deploying a research-based motivation to innovate tool helped EngServ to think critically about the role of innovation culture across the organization. The EngServ team also continued work with their scenario to implement the research-to-practice insights into company operations, as described their full case story below (appended as Annex 2).

<sup>1</sup> Although this implementation stage was beyond the scope of our research study, our team was able to support the implementation work with in-kind contribution of time and continues to assist with tracking results.

- 3. LTC Network is a progressive network of long-term care retirement villages across Ontario. Innovation is at the core of LTC's operations, and their staff previously participated in an innovation catalyst training program. However, engaging a broad range of employees in innovation continues to be a challenge and the innovation leadership would like to see more front-line workers included. Research syntheses and adaptation ideas were created for both issues and implementation scenarios are being considered for their 2024 plans.
- 4. Academy Canada is a leading private training institute in Newfoundland and Labrador, with 15 locations across the province focused on "training Canada's future workforce." The company was new to the concept of workplace innovation for quality of work but recognized the potential value in enhancing company performance and quality of work life, as well as opportunities for leadership in their sector. From the research synthesis of opportunities, the company selected for their pilot study a research-based scenario to build a progressive sequence of employee innovation opportunities. The first steps in implementing this pilot study scenario are now in progress, with expected completion by the fourth quarter of 2023.
- 5. With one workplace partner we were not initially successful in identifying research-to-practice insights. ForestCo, a B.C.-based company in the forestry products sector requested a research synthesis specific to their industry sector on developing a stronger innovation culture. However, our research did not identify insights on this issue within companies in the forestry sector in Europe.

Given that forestry is a key sector in northern Europe – where much workplace innovation research has been based – we found this lack of sector-specific research on innovation culture to be surprising. However, our European colleagues informed us that this reflects sector-specific regional anomalies (e.g., forestry sector labour associations not participating in national trilateral government-industry-labour relationships).

After further study of innovative work within the forestry sector in northern Europe, we later followed up with ForestryCo through a research synthesis on a closely related topic: the role of workplace innovation for digital transformation within forestry companies. Past research in Europe has demonstrated a key role for employee-led workplace innovation in contextualizing digital transformation within specific companies [Oej et al 2019; Dhondt et al 2023], and ForestyCo is currently considering the results of the new synthesis. We also noted one element of this research referenced later in our consideration of inclusive workplace innovation, namely the opportunities and issues for digital transformations to broaden the workforce in male-dominated work domains [Roos et al 2021].

To supplement these snapshots, both the ENWIN and EngServ case stories (in Annexes 1 and 2) include details about the full research adaptation and samples from the research syntheses that targeted the organizations' contexts. For the two other successful workplace case stories described in this section, we are awaiting further evaluation and/or approval by the workplace partners involved before publication. We plan to post more details on our project website when those results are available.

#### Analysis: workplace case stories and research adaptation

The case story experiences summarized above demonstrate how research insights from Europe – and some from Canada – can be adapted to advance employee-led workplace innovation in Canadian workplaces. Even the initially-unsuccessful case story identified a research gap that future Canadian research could address, and we are awaiting potential further discussion on the alternative research synthesis topics that we identified as of interest to the company's goals.

However, scalability of the research adaptation process raises potential issues. Our initial case stories were developed by Innovation leaders who had developed a sense of professional identity around their innovation leadership role. They demonstrated more capability and interest in understanding the research evidence to address their organizational priorities and pain points. They could create their own business case scenario(s) to take forward within their organizations and only required a modest level of support from our research team.

As we extended participation to a broader range of workplaces, there were gaps in the required understanding of workplace innovation and less absorptive capacity for research adaptation. This meant that more support from our research team was necessary to help the workplaces identify their key priorities and pain points. For example, these workplaces with less familiarity with employee-led innovation needed to recognize the critical importance of (1) developing workplace innovation strategy to align with organizational goals, (2) fostering employee capability in a broad range of innovation activities, (3) creating a supporting infrastructure of organizational capability.

We developed a workshop, Workplace Innovation: From Goals to Game Plans, to support these workplaces that were less experienced with workplace innovation. While this additional assistance helped them in their organizational journeys, each partner workplace still required a level of effort from our team to support their research adaptations that we recognized could be a barrier to wider scale-up and dissemination. We outline below, as a Future Directions, a promising approach to address this challenge with the support of an extended set of network hub partners.

## Network hub partner case stories and analysis results

In addition to their roles in facilitating workplace case stories, three of our Network Hub Partners also served as Case Story sites: the research team identified research insights for those Partners to serve their member workplaces in accelerating inclusive workplace innovation. The results described below for Electricity Human Resources Canada (EHRC), WEtech Alliance and Newfoundland and Labrador Workforce Innovation Centre (NLWIC) suggest that scalability across Canada can be accomplished by enhancing existing organizational roles and developing new ones.

This finding raised an additional issue about the current fragmentation of responsibility for public policy and programs to support workplace innovation in Canada. Each of these network hub partners has some aspects of the mandate, mission, connections and resources to play a key role in their regions or sectors; none has all of the required elements. There are also multiple governmental stakeholders to be engaged, within and across levels of government.

We propose in the *Implications and Future Directions* section below some initial steps to help streamline and leverage the contribution of these various agents of change, and in the annexes we share some of the relevant European research insights related to our modest initial steps (Annex 3) and to the bigger picture of public policy and programs longer-term (Annex 4).



- 1. Electricity Human Resources Canada is a non-profit organization supporting human resources needs of Canada's electricity and renewable energy sector. In their initial discussions with us, EHRC leaders identified two organizational priorities:
  - (a) Attracting workers into the electricity sector, including a younger and more diverse workforce<sup>2</sup> and those already in the workforce within other sectors.<sup>3</sup>
  - (b) Addressing the breadth and depth of technology and process changes emerging in the sector such as green technologies like electric vehicles. For example new job roles require updated or new National Occupational Specifications (NOS). In 2021, EHRC had released 11 new National Occupation Standards specifications for new job roles.

Based on the timeline and resources available, we jointly selected the National Occupational Specification for Project Managers as the focus for research adaptation. There is a growing body of research on the adaptations required for Project Managers related to managing innovation projects. Much of this research is linked to the Project Management Institute, the professional body for project managers, and the need for revision and updating of its PM Body of Knowledge, which is referenced extensively in EHRC's current Project Manager NOS.

Since EHRC was not able to evaluate the research insights within its own organization, with EHRC's approval our research team is currently documenting examples from the emerging body of research on innovation project management, to field test with project managers in the ENWIN utilities case story in Annex 2. We will then create both short-term and long-term scenarios for EHRC to share for consideration by its network of member companies and organizations:

- Short-term action by EHRC member organizations to apply these research insights for potential changes to the roles and capabilities of their project managers (and incorporation in EHRC's (NOS) for project managers.
- Long-term (i.e., delayed) action to await changes in the professional resources referenced in EHRC's Project Manager NOS (i.e., the PMI Body of Knowledge) before implementing changes to incorporate innovation project management into the roles and capabilities or the EHRC NOS for Project Managers



The challenges we identified for advancing workplace innovation in specific sectors like that of EHRC are included in the *Findings* below.

<sup>2</sup> For example, recruiting new employees through work-integrated learning placements offered through higher education programs such as the certificate programs at Sheridan College in Ontario. <a href="https://www.sheridancollege.ca/en/programs/ap-plied-creativity-innovation">https://www.sheridancollege.ca/en/programs/ap-plied-creativity-innovation</a>

For example, the PowerShift project that attracts workers from Alberta's tourism and hospitality sector. <a href="https://electricityhr.ca/2022/10/20/new-resources-to-power-up-albertas-electricity-workforce">https://electricityhr.ca/2022/10/20/new-resources-to-power-up-albertas-electricity-workforce</a>

2. WEtech Alliance is one of 17 Ontario regional innovation centres "where entrepreneurs can access programs and services to help them grow their business" [Government of Ontario 2021] as they bring products and services to market. As part of that mandate, WEtech has developed skills development programs to attract and enable talent in growing companies.

One of those initiatives, the <u>Innovation Catalyst</u> program, was developed in 2018 to "activate front-line staff as engines of innovation" in the workplace. This program proved to be of wider interest in developing capability for innovation – at employee, team and organizational levels – and grew to include organizations in the public, social and community sectors. Through participating in our research adaptation project, WEtech could explore how an augmented and expanded Innovation Catalyst 2.0 initiative might extend the value offered to its regional partners throughout southwestern Ontario.

Accordingly, our research synthesis for WEtech focused on curating research insights and exemplary practices to augment the Innovation Catalyst program in three areas:

- (a) The Innovation Catalyst offerings originally focused on design innovation as a social process with design thinking as the primary social technology [Liedtka 2020] involved. Within that focus, we identified the following areas where emerging research insights could potentially enhance the Innovation Catalyst program:
- Skills for innovation, including advances in workplace design thinking practices
- Training for innovation, including improved methods to develop design thinking capabilities
- Impact of innovation to enhance organizational value and reach of design thinking
- (b) To address different workplace needs or to engage a broader range of employees, there are other social processes for workplace innovation that often co-exist with design innovation, for example idea management systems, job crafting and open innovation. We identified opportunities for WEtech to enhance the Innovation Catalyst program by integrating design thinking into a broader set of workplace innovation activities.
- (c) Finally, we identified recent research to enhance the Innovation Thesis Elements of the Innovation Catalyst program, which currently helps executive teams align their innovation plans with organizational strategy and goals. The key research insights in this area came from our research partners in Workplace Innovation Europe and focused on developing organizational capability to support and leverage employee workplace innovation. Some of these had already been embedded in our Workplace Innovation: From Goals to Gameplans, workshop.

These opportunities helped WEtech envision enhancements to its current innovation catalyst offerings to support a more innovative workforce in the region, including both their primary target audience of rapid-growth companies and in other sectors, including as well key roles for the higher education institutions in the region. However, engaging a broader set of partners requires new sources of support for the initial investment of staff resources in new forms of collaboration.

The results of the WEtech Alliance engagement align with the results reported in the NLWIC scenario (explored below). We will return to the proposed joint scenario for both network hub partners in the *Findings* section below.

- 3. The NL Workforce Innovation Centre (NLWIC) was established in 2017 by the Government of Newfoundland and Labrador and is administered by College of the North Atlantic. NLWIC has a provincial mandate to engage NL labour market stakeholders in collaborations on challenges, opportunities and best practices in workforce development. The centre promotes research, testing and sharing of new ideas and models of innovation in workforce development that will positively impact the province's labour force, and particularly underrepresented groups. NLWIC joined the research project with two outcomes in mind:
  - (a) To explore employee-led workplace innovation for quality of work to advance workforce innovation in Newfoundland and Labrador
  - (b) To apply inclusive workplace innovation for quality of work to address retention and recruitment of older workers for Newfoundland and Labrador

Two promising elements emerged for research adaptation scenarios to address these NLWIC goals:

- NLWIC's efforts to promote workplace innovation for quality of work within Newfoundland and Labrador demonstrated that there was a strong interest across a spectrum of stakeholders: corporate and not-for-profit sectors, equity-seeking groups, higher education, regional economic development, and the NL Ministry of Immigration, Population Growth and Skills.
  - NLWIC also arranged for both post-secondary institutions in the province College of the North Atlantic and Memorial University to meet with our team, and each identified a potential pilot program of study through which they could test the development of student capability for workplace innovation. In addition, a leading training institute in the province, Academy Canada, became one of our workplace case stories as outlined above.
- The NLWIC case study built on previous research with the St. John's Board of Trade and identified a considerable body of further research focused on achieving inclusive workplaces with older workers to encourage extended work lives. However, the research assumed that inclusion would place older workers into existing organizational innovation programs. There was no established on-ramp in the province to assist workplace partners to begin building employee and organizational capability to enable inclusive workplace innovation. Additionally, some Canadian research has also indicated that older workers were often left out of existing programs to promote innovation [Lord & Therriault 2018].





#### Findings: network hub partner case stories and research adaptation

One generalizable result of note from our EHRC case story is the recognition that sectors with less pressing needs for new technical capabilities may be more likely testbeds for advancing workplace innovation for quality of work (at least in the short term). In principle, workplace innovation capability – at employee, team and organizational levels – can help a sector's workforce adapt to new technologies, job roles and business models. However, in practice, urgent demands for new technical skills can be expected to displace attention to innovation capability development, despite the potential for earlier mastery of innovation capability to accelerate adaptation of emerging technological innovations.

A second result of note came from the research synthesis and adaptation process with both WEtech Alliance and NLWIC, which revealed promising research adaptation scenarios for workplace innovation that are beyond the current mandates and resources of these publicly supported agencies. However, both organizations expressed strong interest in facilitating such collaborations with an expanded set of stakeholders in their regions. Engagement of a broader collaboration of stakeholders to advance workplace innovation in the regional workforce ecosystem must begin early on with the development and evaluation of new collaboration structures, and must include employers, employees, researchers, governments at various levels, and other stakeholders in workforce well-being such as labour associations and equity-seeking groups.

In the *Implications and Future Directions* section below, we outline one promising research-based model to support the required new collaborations at the regional level.

## Implications and future directions

The Findings reported in the previous section demonstrate how Canadian workplaces can advance inclusive workplace innovation for quality of work in their organizational contexts, by adapting research insights and evidence-based exemplary practices from global leaders(to augment the research advances emerging in Canada. There are also specific research gaps in sectors of importance for Canada.

Two challenges in extending research adaptation for workplace innovation were also noted:

- 1. Scalability: We observed that organizations in the early stages of developing workplace innovation capability need more contextualized support to understand the possible directions they might pursue and to set priorities for research insights to consider. For research mobilization and adaptation to assist a broad range of Canadian organizations to engage their workforces in inclusive workplace innovation, more scalable approaches will be needed. Canadian researchers have the expertise and relationships to identify relevant research by curating the insights from global leaders, but the insights require contextualization for effective knowledge translation into the workplace level.
- 2. Responsibility: As noted in the WEtech and NLWIC case stories, there are promising opportunities for regional public agencies on-the-ground to help connect their regional employers into an ecosystem to accelerate inclusive innovation at the workplace level. The expanded collaboration should include organizations focused on workforce well-being and inclusion (e.g., labour unions and equity-seeking organizations), researchers and the new research mobilization partners sketched above, and other stakeholders. Regional economic and workforce development entities are already well-placed to be key hubs for such connections as explored further in Annex 3.

Currently, agencies such as WEtech Alliance and NLWIC have not been tasked with this responsibility. However, leaders of both organizations agree that such initiatives support their overall mandates and that further exploration and experimentation to identify the appropriate regional collaboration structures would be valuable and timely.



#### **Future directions**

## Living labs: cross-sector collaboration to advance workplace innovation for quality of work

The Findings above on the case stories for our WEtech and NLWIC network hub partners noted the need for a more extended collaboration of stakeholders to develop and test regional workplace innovation ecosystems. We therefore extended our planned study of European research on public policy and programs for workplace innovation and quality of work, to identify new models to address the scalability and responsibility challenges at the level of regional innovation ecosystems. That extended research, summarized in Annex 3, resulted in a focus on enhancing European living labs models for cross-sector collaboration and shared responsibility.

**Living Labs** are user-centered, and integrates open-innovation ecosystems, often operating in a place-based context (e.g., city, region), integrating concurrent research and innovation processes within a public-private-people partnership.

#### **Key Building Blocks:**

- Orchestration: the living lab operates as the orchestrator within the ecosystem to connect relevant stakeholders across sectors.
- Multi-stakeholder participation: involving stakeholders from the quadruple helix model (government, academia, private sector, and citizens).
- Co-creation: in a living lab, values are bottom-up co-created not only for but also by all relevant stakeholders, ensuring a higher level of adoption.
- Multiple methods of experimentation: Living Lab activity is problem driven. A variety of approaches are used to align the problem, expected outcomes and stakeholders involved.
- Real-life settings: a living lab operates in the real-life setting of the end users, infusing innovations into their real lives.

(as defined by the European Network of Living Labs)

NLWIC and WEtech leadership have expressed strong interest in cooperating on developing living lab collaborations to advance workplace innovation capability at the individual, team and organization levels in their respective regions. The complementary capabilities and relationship networks of these two partners – and their regions – can be accelerated by sharing resources and insights across regions. We have already noted some further implications in our initial discussions:

- i. The feasibility of a network of co-operating regional living labs in Canada is being tested by <u>Agriculture Canada's Living Laboratories Initiative</u>, which also includes ongoing research on the evaluation and effectiveness of living labs within their specific context [Beaudoin et al 2022]. We intend to build on this research, together with the experiences of other recent Canadian living lab experiments. For example, the City of Summerside, Prince Edward Island Living Lab [Summerside 2017] and the Pier Living Lab in Halifax [Leclerc & Ircha 2023] that fosters multi-sector collaboration in workplace innovation.
- ii. In our context of a living lab focused on workplace innovation capability, many of the relevant publicprivate stakeholders are already connecting through regional workforce development alliances, including economic development agencies at government levels, employers across sectors, education institutions,

labour associations and community partners involved in workforce inclusion. However, the launch of a living lab – either as a new activity of the workforce development alliance or as an affiliated stand-alone entity – will require willingness to rethink collaboration and operating models from task force models in current workforce development initiatives to more active experimentation with open innovation.

- iii. The people component of such a living lab will also include workplace innovation teams from all participating organizations. All the stakeholder organizations will also want to develop their own organizational capability for workplace innovation. For example, as part of its workforce development activity a municipality or regional government might serve as host of a living lab to adapt, develop and test advances in workplace innovation. That commitment should include participating as an employer in the experimental activities of the living lab with its own workplace innovation activities.
- iv. Another new element to be explored for regional living labs on inclusive workplace innovation is an enhancement of the current role of higher education institutions. The existing emphasis in living labs has been on roles as co-partners in applied research. In the new models to support a focus on workforce capability for innovation, higher education can also engage in cross-sector experiments on preparing graduates to engage with innovation in the workplace. This is an area where Canada already has some globally exemplary expertise [Workplace Innovation Network for Canada 2022].
- v. In addition to providing fundamental knowledge and skills for workplace innovation, higher education can also collaborate with other stakeholders on experiments to address the scalability issue for research adaptation noted above. For example, senior undergraduate student teams in work-integrated learning placements could support curation and contextualization of research insights and exemplary practices as part of their workplace field work. There are some initial design ideas for such an approach in a pilot study for an Australian partner done in collaboration with the Workplace Innovation Network for Canada [2020].



## Reframing workplace innovation as inclusive innovation realized at the workplace level

The topic of inclusive innovation has appeared in Canadian research as part of explorations of "distribution-sensitive innovation policies" [Zehavi & Breznitz 2017], to address disparities in regional innovation-related activities and to expand the range of beneficiaries for innovation results (enhancing the inclusion of equity-seeking groups in the workplace). An additional implication emerging from our research has led us to a change in our terminology: we have begun to use "Inclusive Workplace Innovation" as a way to highlight how our research-to-practice initiatives link to the larger body of Canadian research on Inclusive Innovation and to suggest additional ways that employee-led Workplace Innovation can promote more inclusive workplaces.

Canada already has strong research centres studying inclusive innovation, including the Innovation Policy Lab at the University of Toronto [Zehavi & Breznitz 2017], the Institute for Science, Society & Policy at the University of Ottawa [Schillo & Robinson 2017] and the Brookfield Institute for Innovation [Munro & Zachariah

2021] recently repositioned within The Dias at Toronto Metropolitan University. The concept has also transitioned into practice as a tool in policy formation for social innovation at Employment and Social Development Canada [ESDC 2018].

European research has explored inclusion through the lens of employee-led innovation within workplaces; e.g., in promoting innovation activities outside major urban centres [Totterdill 2014; Habibipour et al 2021] and addressing other potential beneficiaries of innovation activities [Mathieu et al 2021; Pot et al 2022]. Missing from the published research are intentional efforts to be more inclusive about promoting innovation participation for workers excluded in the past. For example, recent research advances to engage more employees with intellectual disabilities in workplace innovation [Meacham et al 2017; Bamber et al 2017; Owren 2019] and to adapt design thinking methods for neurodiverse employees [Gaudion et al 2015; Fabri & Sutterfield 2019; Melo et al 2020; Maun et al 2021] have yet to be moved into wider workplace practice.

In our own future work, we intend to explore this reframing as inclusive workplace innovation to emphasize both more inclusive distribution of innovation activity and more inclusive benefits of innovation, as contextualized within a workplace including both improved quality of work life and other inclusion goals. We anticipate that this will also help us to explore potential links with the other Canadian research initiatives cited in the previous paragraph, who are advancing inclusive innovation in broader contexts beyond individual workplaces.



## **Annex 1: ENWIN case story**

Victoria Abboud, Rosana Kemsley (ENWIN) and Barry Leavitt (ENWIN) with contributions from Thomas Carey, Adam Frye and Peter Totterdill

#### I. Organizational context

ENWIN is a municipally owned and operated energy and water services organization that serves the greater Windsor region in southwestern Ontario. Part of the organization's vision is "to be a trusted leader in providing exceptional value and services to customers (90,000) and stakeholders" by engaging its employees (320<sup>4</sup>).

In 2018, ENWIN identified the desire to engage its employee base and build a culture that encourages, promotes and values innovative problem-solving. Grassroots initiatives were supported and shared through the organization's first ENnovation Day. The co-leaders of the ENnovation initiative were ENWIN's manager of human resource services (Rosana Kemsley) and the director of operations (Barry Leavitt, whose position was subsequently retitled to include both operations and innovation).

By the next year, ENWIN partnered with WEtech Alliance, one of 17 regional innovation centres in Ontario, to engage greater numbers of staff and which subsequently established the day as an annual horizon. Known as ENnovation Catalyst, the pilot grass roots program encouraged employee sign-up to participate and to influence the strategic road map with their ideas. The participants were trained in human-centred design thinking and coached to produce a pitch for the executive team. The learn-build-deliver training was delivered in late-2019, and, despite the COVID-19 pandemic, resulted in high engagement and collaboration across two cycles. In total, ENnovation participants produced 13 project proposals. Eighteen employees became catalysts, more than 50 employees were involved in Ideation Day, and 26 additional employees were oriented to innovation and design thinking.

As an example of an organization that had already begun its workplace innovation journey, the additional research insights and potential adaptations that the project team shared with ENWIN provided the organization with more critical awareness of the innovation initiatives that the organization had employed. For example, the Fifth Element model shown graphically in Figure 1 below [Totterdill & Exton 2014] highlights several issues in organizational capability – such as job design, employee voice, and processes and policies – to support employee-led workplace innovation, as well as the need for integrative thinking to align innovation planning across all of these (i.e., the Fifth Element). This insight became a scenario that supported ENWIN to engage in stretch goals exercises to expand and extend the organization's ENnovation process.

According to Kemsley and Leavitt, ENWIN's co-leaders of ENnovation, the program process aligns with the three current elements used for stretch goals: (1) build the tools, (2) make It better, and (3) move the needle.

#### (1) Build the tools

To enable today's work while also preparing for tomorrow, demonstrated job or individual development is a potential step that employees can take. HR and the employee's manager support, facilitate, and co-ordinate the opportunity. Individuals can participate in an enabling committee to focus on ideation day, process improvement (PI) council, S'Well (ENWIN's Social and Wellness Committee), and others to support innovative

<sup>4 100</sup> management (non-union) and 200 union employees (including 150 field workers who have no regular "office" responsibilities).

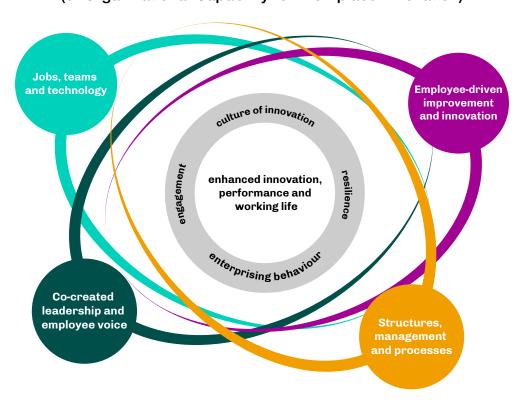


Figure 1: The Fifth Element Model (of Organizational Capability for Workplace Innovation)

culture in the organization. Further, employees are encouraged to find or be a mentor through structured opportunities that include job shadowing, collaborative mini-projects, collaborative ENnovation projects that result in proposals to the executive team, tag-team presentations at senior management team meetings, and creating small teaching teams to support colleagues, etc.

#### (2) Make it better

To inject new business change, the ENWIN team encourages employees to identify an area of interest to move through the innovation and/or process-improvement milestones. Departments may create a structured roadmap to improve their business operations by using process-improvement methods, design thinking steps, etc., or they may select from the unionized employee suggestion program and partner with the suggester to move the idea through the innovation evaluation and implementation process. Further, employees may also choose to complete an existing make it better project.

#### (3) Move the needle

Employees who choose to move the needle focus on protecting organizational strategic projects. They may be dedicated to a corporate goal as their goal, or they may take on incremental work to support a colleague who is dedicated to a corporate project. They also have the option to complete two make it better goals without working on a move the needle goal.

The ENWIN innovation leaders also expressed interest in exploring the adaptation of the Workplace Innovation Diagnostic® tool [Totterdill & Exton 2021] for their Canadian context. The diagnostic is a distillation of

research work from the European Union Workplace Innovation Network, which provides an evidence-based understanding of organizational capability for workplace innovation to enhance business performance and employee wellbeing. ENWIN's innovation leaders have requested that members of our research team revisit this possibility with them in Q3 2023.

Since 2018, ENWIN has created its culture of innovation by transitioning from program-based to culture-based innovation strategies, building design thinking and innovation into the existing performance management ecosystem, and incentivizing the right solution over the immediate solution. The team tested the ENnovation model for three years while using independent research, third-party engagements and continuous engagement and consultation with employees to support their efforts.

In 2022-23, the project leads innovated on the learn-build-deliver training program and pitched embedding innovative problem-solving into the fabric of ENWIN's culture through an ecosystem of policies, processes and systems that would accomplish the following goals: (1) positively influence culture, (2) reduce oversubscription of people/projects, and (3) support sustainability of the program.

#### II. Results and lessons learned

In November 2022, Kemsley and Leavitt pitched this scenario to their C-suite executive team and received executive approval for implementation. Afterward, they commented:

"We had a successful pitch and full executive endorsement to move forward with our proposal earlier this week. The roll-out has started and we're already fielding inquiries from the rank and file with more to come over the next few weeks. We also have to curate some of our innovation catalyst material and streamline for this process that will fully kick off in January [2023]. We probably won't know until sometime in early January how many 'warriors' we have after the business carves out resources for the existing priorities, but we suspect it will be a healthy cohort."

When asked to reflect on the evolution of ENWIN's strategy for workplace innovation, the ENnovation leaders shared the following:

"ENWIN has learned that buy-in is vital. Leadership must support and reinforce the investment of time, resource, and money. Those staff members who are enthusiastic must be encouraged to lead. They must have the time to learn and grow, be open-minded, and approach challenges with a beginner's mindset.

Psychological safety is a key pillar in building a culture of innovation. More specifically, the culture must welcome new ideas, encourage divergent opinions, and be willing to empower team members at all levels and with all outcomes; i.e., failure and surprises must be applauded.

Celebration is a tenet of ENWIN's approach to innovation, which includes having fun! Collaboration with peers and celebration of 'a-ha' moments and learnings are important, as is taking the time to support team building."

Overall, ENWIN believes in integrating innovations into established systems and processes to support systemic change and in recognizing that the expectations must be built into the systems rather than being above and beyond employees' work. Further, it is vital that there is a variety of opportunities for employees to engage in workplace innovation. Rather than dictating the types and forms of innovation that are acceptable, employees must have the opportunity to engage in ways that are still palatable and comfortable to them. While ENWIN encourages stretching, the element of psychological safety in doing so is paramount.

## Annex 2: "EngServ" case story

Victoria Abboud, Stephen Cohos (EngServ), Blake Melnick and Terry Soleas with contributions from Anahita Baregheh and Tyrenny Anderson

#### I. Organizational context

EngServ is an engineering services company in Western Canada that focuses on offering progressive solutions to complex challenges. As a group of "passion-fueled engineers, designers, technologists, and city-building experts," the EngServ team consistently strives for agility and sustainable performance.

With approximately 270 employees across five offices in Canada and the United States, EngServ has built its 147 services for the last 12 years in the following key areas: bridge engineering, building envelope, construction engineering, expert advisory services, fire engineering, restoration services, special projects, structural engineering and sustainable performance.

The innovation team of the company, the Engovation Committee, includes both a scouting role for opportunities and talent, and a broker role. The lead, Stephen Cohos, works half of his time as the project co-ordinator and the other half as the lead in another work area, and Cohos is supported by two innovation specialists.

EngServ identified the need to develop strategies to encourage all employees to engage willingly in the innovation opportunities provided by the firm in the form of (1) Idea Hopper and (2) IMPACT challenges that lay outside of both the employees' formal engineering training and areas of specialization. In both cases, EngServ hoped to improve participation and results (i.e., the "solutions" identified through either pathway).

The Idea Hopper and IMPACT are separate entities. The Hopper is always open and used to identify short innovation sprints as various ideas arise while IMPACT is a once-a-year event where EngServ offers an opportunity for employees to bring forward big ideas that could earn \$10,000 worth of funding to implement them. Further, IMPACT is guided by the annual strategy of the firm. For instance, in 2023, EngServ focused on the Engine of EngServ: securing work, doing work, and earning revenue. This year's theme centres on ideas that can increase efficiency on projects. Last year was about developing new avenues or sectors of work.

Both initiatives have demonstrated success, along with challenges related to participation and the potential for actual solutions to perceived issues.

(1) Idea Hopper: By using a collaborative software system, Output, for the Idea Hopper, contributors are asked to identify the value proposition of the idea (using EngServ's three innovation levers as a framework: revenue, efficiency/effectiveness, social culture). As of January 2023, there were 360 ideas in the Idea Hopper. Every idea is categorized using a T-shirt analogy: XS (extra small) to L (large).

As part of the Idea Hopper, EngServ created a "poke holes" review process, where everyone in the firm can see each other's contributions and poke holes (i.e., ask questions, offer comments, etc.). Judged by the number of people across different functional areas who are engaged with the idea, the idea can be deemed to have merit. If it does have merit, a decision is made regarding the idea size and scope based on the T-shirt analogy, and depending on size and scope further decisions are made about what elements of the idea can be tested.

Although a collaborative and well-structured process, the Idea Hopper strategy did not always capture the improvement projects generated at the firm. Most often, the lack of capture was a result of the employees envisioning the projects as one-offs rather than recognizing the potential and/or creating the opportunity to embed the idea or project into the fabric of the organization.

**(2) IMPACT Challenges:** Although there was greater participation in the IMPACT Challenges (i.e., 30 employees asked to be added to a team), there became additional concerns related to the initiative:

- Of the 10 project submissions, only three moved on to the pitch stage
- The number of interested employees required additional efforts to match their preferences with others within the organization
- Some employees raised concerns such as "my boss might not like me doing an IMPACT Challenge project" or "I don't have enough experience to take on an IMPACT Challenge."

Overall, the workplace innovation strategies that EngServ employed were not addressing the firm's goals for inclusive workplace innovation. There was not a clear connection between the strategies and HR management functions, and the project management for innovation projects was much different than typical project management that employees would find most familiar. For example, one strategy was expressed informally as the "three times rule": if an employee is dissatisfied with a work process three times, they should report it to the team lead. However, this rule was not applied consistently and there was no formal tracking of the results from the reports that were made.

The focus of EngServ's efforts became how to empower employees to build the work they would like to be doing and to be able to support the employees in doing that work. To support this goal, the EngServ team intended to learn why employees were not engaging with the current innovation opportunities offered at the firm. Supplementary goals for these workplace innovation initiatives included building an innovation culture that would attract the best engineers and creating social impact by establishing a more inclusive and diverse team.

#### II. The scenario

Through consistent communication and consultation, it was determined that EngServ would need to achieve the following:

- Encourage employee self-efficacy
- Support employees to recognize their own personal motivations towards innovation
- Identify the triggers that urge individual employees to want to engage with innovation in the context of their day-to-day work

Not only would uncovering these results provide individual employees with deeper understanding and insights about their own personal motivations for innovation, the results would also reveal to EngServ how it might plan for and design future innovation opportunities.

Our research project team supported EngServ by providing a targeted research synthesis addressing the EngServ priorities, included at the end of this case story. Based on feedback on the most promising elements of the research synthesis, the research team expanded the synthesis with further research by Dr. Eleftherios (Terry) Soleas of Queen's University [Soleas & Bolden 2020; Soleas 2020a, 2020b, 2021]. Dr. Soleas had developed a self-assessment instrument, the Motivation to Innovate (MTI) Inventory to examine the expectancies, values and cost of innovating as a means of promoting future innovation efforts. He joined the research team to support scenario-building and further activities.

The scenario included activities to adapt the MTI Inventory for use in a workplace setting and further modifications to align with EngServ's innovation ecosystem and workplace culture. By ways of a clear communication strategy and letter of consent (both co-created with the research team and the EngServ Ennovation Team), employees were to be consistently informed about why EngServ was delivering the MTI Inventory and what the firm hoped would be the results, both for the firm itself and for individual employees; namely, the following:

- Participation in the MTI Inventory would support deeper understanding and insights about personal
  motivations for innovation. One way that the individual support was achieved was by providing each
  respondent with an individualized insight report about their personal motivations to innovate
- Differences in perceptions about innovation and motivation to innovate would be revealed and provide additional context about the firm's employee pool
- Understanding individuals' motivations to innovate could support match-making for diverse, inclusive, innovative teams
- Employee self-reflection could be an important experience that would increase employee selfefficacy and inform EngServ's design approach for creating innovation opportunities

#### III. Results

After isolating the firm's question about innovation, ("How do we encourage all employees to engage in innovation so that they might take an active role in defining the job they want?"), the research project and EngServ Ennovation team piloted the MTI Inventory instrument internally with this small group to use the feedback to modify survey questions and add clarity for the individual employee insights reports. The MTI Inventory instrument was set up to anonymize responses so that employees could expect a level of confidentiality that would encourage honesty. The individualized insights reports would be shared only with the specific employee and the firm would receive only anonymized, aggregate data.

As part of the qualitative questions, EngServ respondents identified the supports and factors that facilitate their process of innovation and the barriers they have experienced while involved in the process of innovation. Select responses are below:

- "EngServ backed my idea through the IMPACT Challenge and provided me time and resources to develop the program."
- "Sometimes [barriers to the process of innovation include] the mindset of individuals: We have always
  done it this way."
- "The team and environment are huge contributors, creating a safe space to bounce around any and all ideas and a space to consider pros/cons and discuss."

Further information about the EngServ case story process and results is available in the podcast series, "For what it's worth with Blake Melnick" [2022], episodes Understanding the Motivations to Innovate Part 1 and Part 2, Entuitive Ennovation Part 1 and Part 2.

# Annex 3: Research on European policy and programs in workplace innovation for quality of work: selected insights for Canadian contexts

Thomas Carey, Natasha Castela Lopes and Anahita Baregheh

Examples of the ongoing recognition of employee-led workplace innovation in economic and social strategy for Europe were included in the Introduction of the project report (from 2014, 2019 and 2023). In this annex, we highlight research insights about the policies and programs developed at national and regional levels to advance workplace innovation, for the following topic headings:

- 1. Examples of the rationale used for public support of workplace innovation programs
- 2. Examples of national and regional policy and program interventions
  - one country in detail and several country and regional snapshots
  - accompanying Insights on Scalability and Responsibility issues for Canada
- 3. An illustration of adapting European insights for public policy/programs in Canada
- 4. Two new European public policy and program research initiatives of note
  - Innovating through Experimentation: The European Commission's new project on promoting more experimental and evidence-based innovation policies
  - Bridges 5.0: Towards a Human-Centred, Sustainable and Resilient Economy

# 1. Examples of the rationale for public support and programs in workplace innovation

#### Workplace innovation for quality of work leads to social benefits beyond the workplace

- "Evidence shows that workplace innovation leads to significant and sustainable improvements in firm performance...Workplace innovation also increases employee motivation and well-being, playing an important role in reducing stress, enhancing job satisfaction and mental health, and improving retention." [Totterdill et al 2016]
- "There is a growing body of evidence that the enhanced quality of working life associated with
  workplace innovation can play a decisive role in the achievement of multiple social and economic
  challenges facing Europe, including...closing the EU's productivity gap, increasing the rate of new
  product and service creation, improving the retention of older workers, and improving occupational
  safety and mental health." [Pot et al 2023]

#### Market mechanisms based solely on economic goals have not proved successful

- "Workplace innovation connects different policy agendas such as productivity, innovation, skills, digitalization, quality jobs, social dialogue and the European Pillar of Social Rights. Policy interventions will be required to achieve these win-win benefits." [Pot et al 2023]
- "The evident shortfall in 'good jobs' can be viewed as a massive market failure. The market
  mechanism is not going to provide a 'good jobs economy' on its own without focused interventions
  by social partners and public authorities." [Rodrik & Sabel 2020]
- Innovation is viewed as particularly critical now, as Europe transitions to a green and digital
  economy. "Businesses have to develop processes, products and business models that are
  compatible with a climate-neutral future. They will have to digitize across their operations and
  outputs, and do so fast to stay abreast of the competition" [Eurofound 2021]

# 2. European research on policy/program interventions: scalability and responsibility

We turn now to the specific policy and program initiatives at the national and regional levels in Europe, seeking insights of potential value to policy and program planners in Canada. In addition to curating examples of specific interest to Canada in Section 3, we will also illustrate the possible application of such insights using the scalability and responsibility issues outlined in the project report for our own Future Directions recommendations. We will return to an EU-wide perspective in the closing section (Section 4) of this annex, which reviews two recent EU-wide research programs and possible Canadian participation and contributions.

In our project report, we noted the advantages of better Integration of high-level policy goals for innovation performance and quality of work. In the results and analysis in our project report, we also identified two issues for ongoing research-to-practice adaptations of research insights and exemplary practices to accelerate workplace innovation for quality of work in Canada: focusing responsibility for orchestrating multi-stakeholder collaborations and improving scalability of our initial research-to-practice approaches. Our study of research on national and regional initiatives for workplace innovation policy and programs in Europe revealed that these three issues were often at the forefront of policy and program planning.

We have therefore extended the scope of our original survey of national initiatives in workplace innovation and quality of work to include regional initiatives and specific insights on these two issues. As noted below, both new emphases have been valuable in shaping the Future Directions recommended in the project report.

#### a) Selected national initiatives (Finland in detail, other countries in snapshots)

Finland has a long history of programs to support workplace innovation and quality of work:

Figure 2
History of programmatic development of work life in Finland between 1993 and 2023



[Alasoini et al 2023]

The scope and focus of responsibility in these Finnish programs and the lead government agency has evolved over time [Oeij et al 2023]:

- The first three stages were driven by improving work life and led by the Ministry of Labour
- The Working Life 2020 initiative was driven by a national innovation strategy and led by the Ministry
  of Employment and the Economy
- The most recent WORK2030 program was based in the Ministry of Social Affairs and Health (in co-operation with the Ministry of Economic Affairs and Employment) and led by the Finnish Institute of Occupational Health (FIOH). It is focused on workplace innovation in the context of digital transformation and recovery from COVID-19. The strong research orientation within FIOH also provides ongoing links to foster research-to-practice transfer.

This evolution in scope also appears in policy emphases at the EU level. For example, the emergence of Industry 4.0 in Europe was a catalyst to focus more attention on the need to ensure advances in technology were accompanied by advances in human-centred job design and quality of work [Pot et al 2021] and on the key role of workplace innovation in digital transformation [Oeij et al 2019].

A notable theme throughout these stages of development in Finland has been the integration of high-level goals for both economic and social development, evolving over time. As we will see in the examples below, integration can be at national or regional level, so long as it aligns with the responsibility for planning and managing initiatives. We next expand on the further insights from Finland applicable to the project report's scalability and responsibility issues.

#### Insights on scalability

"Our past experiences with various development programs and projects had shown that solutions implemented at individual workplaces — and the lessons learned — were difficult to disseminate more extensively in work life. To bring real changes in work life, networks that bring together different parties need to be involved from the very beginning." [Alasoini et al 2023]

Accordingly, the activities in Finland's most recent program, WorkLife2030, have all been based in preexisting sector or regional networks, to promote continuity and wider dissemination:

- "Industry sector projects are joint development projects between employer organizations and trade unions with objectives that vary according to the industrial sector's special characteristics and needs." [Finland Ministry of Social Affairs and Health 2023]
- "Regional projects are development projects carried out in co-operation with regional Centres for Economic Development [ELY]...that create services to meet the needs of the region's workplaces."
   [Alasoini et al 2023]
- "Regional development projects are co-ordinated by ELY Centres. They are aimed at promoting work
  life reform within the companies and organizations of the region, strengthening regional competence
  and co-operation between work life actors as well as creating a development model applicable to
  other regions." [Finland Ministry of Social Affairs and Health 2023]
- Integration of goals for economic and social well-being is expected in both regional and sector projects.
- [Hirvikoski et al 2020] has more examples of how this multi-stakeholder collaboration works in practice at the regional level in Finland.

#### Insights on locus of responsibility

As noted above, the need to address scalability has also been the determining factor in focusing responsibility on multi-stakeholder collaborations in geographic regions and industry sectors. Another constant in terms of responsibility has been the ongoing participation by numerous social partners in the regional and sectoral projects as well as in high-level planning and co-ordination. This reflects their long-standing national roles as participants in shaping economic and social initiatives. For example: "The WORK2030 program has been carried out jointly by the Ministry of Social Affairs and Health, Ministry of Economic Affairs and Employment, Ministry of Education and Culture, Finnish National Agency for Education, Ministry of Finance, Finnish Institute of Occupational Health, the Finnish Innovation Fund SITRA, Centre for Occupational Safety, Finnish Work Environment Fund, central social partner organizations including the major national business and labour groups (e.g., Federation of Finnish Enterprises -- Suomen Yrittäjät, Business Finland, Confederation of Unions for Professional and Managerial Staff -- Akava, Finnish Confederation of Salaried Employees - STTK and the Central Organization of Finnish Trade Unions - SAK) and a large number of other working life parties." [Finland Ministry of Social Affairs and Health 2023]

Germany has the longest tradition of accompanying technological innovation programs with humanization of work programs. This began with the Humanization of Working Life program in the mid-1970s, but was interrupted in the 1990s by the need to focus policy initiatives on re-unification and economic development [Pot et al 2023]. In recent years the awareness has grown that sociotechnical work organization and job design can contribute to national innovation goals for both economic and social well-being [Pot 2018].

The Innovative work design - future of work program ran from 2001-2006 under the auspices of the Federal Ministry of Education and Research, followed by the Working – Learning – Developing Skills Innovation Competence in the Modern Working World program from 2007-2015 and the Future of Work program "to promote technological and social innovations in equal measure" from 2015 to 2020 [Pot et al 2023] co-funded by the European Social Fund [Alasoini et al 2017].

These policy initiatives for workplace innovation at the national level in Germany – individual states also have their own targeted initiatives [Alasoini et al 2017] — are notable for their integration with Germany's established industrial strengths. For example, one of the driving forces underlying the design of the Future of Work program was the links to Industry 4.0, where Germany had been a world leader. A 2013 study of the implications of Industry 4.0 on the Future of Work, Recommendations for changes in favor of the future project: Industry 4.0; to safeguard the future of Germany as an industrial nation, highlighted the need for deep knowledge of the role of workplace innovation to maintain a leadership position with Industry 4.0 technologies:

"Work organization and design: in smart factories, the role of employees will change significantly. Increasingly real-time oriented control will transform work content, work processes and the working environment. Implementation of a socio-technical approach to work organization will offer workers the opportunity to enjoy greater responsibility and enhance their personal development. For this to be possible, it will be necessary to deploy participative work design and lifelong learning measures and to launch model reference projects." [Working Group for Industry 4.0 2013]

**Insights:** This history and strategy has shaped the current research agenda for the national Future of Work program, which in turn influenced Industry 5.0 developments driving the pan-European Bridges 5.0 initiative reviewed below. We expect that any Canadian participation in such research programs must

consider the connections which other participating countries such as Germany already have in place to aid in disseminating and leverage the research results.

The Netherlands was a European pioneer in experiments with sociotechnical work design from the early 1970s but does not have a similar history of large-scale national programs like those listed above for Finland and Germany. "The promotion of workplace innovation has taken place mainly in individual companies and at industry level through joint efforts by social partners and through the European Social Fund." [Alasoini et al 2017]

However, a recent development illustrates an additional way to integrate the economic and social goals of innovation policy. The Dutch government has designated nine top sectors to be targeted with special support, as areas where the country seeks to be "among the world's best" [Netherlands 2022]. One of these is Logistics, which was selected for special attention to boost workplace innovation. Research in the Dutch logistics industry [Putnik et al 2019] showed that 80 per cent of companies had engaged in innovation in the previous two years. However, in only 40 per cent of the companies were the innovations picked up for wider use by employees. [Oeij et al 2022]

On the other hand, in companies with a 'socially innovative climate' – i.e., a climate that featured the presence of high job autonomy among employees, team voice, and involvement of operational employees in decision making (as illustrated in the Project Report on p. 19) – 90 per cent of the innovations were successful in terms of wider adoption. "This suggests that employee involvement and an innovative culture has a major influence on the innovative capacity of organizations through innovation adoption of employees." [Oeij et al 2022] But only 10 per cent of the logistics companies surveyed reported having a socially innovative climate.

A focused research effort involving firms in the logistics sector and the Netherlands Organization for Applied Scientific Research (TNO) is now fostering advances in workplace innovation across the sector. [Putnik et al 2019; Oeij et al 2020; Oeij et al 2022] As the impacts of this research become clearer, this sector-targeting approach may serve as a model for targeted support in other top sectors in the Netherlands and for adaptation in other countries. As with Finland, the strong research orientation within TNO also provides ongoing links to foster research-to-practice transfer.

**Insights:** In our Canadian context, one possible analogy to the Dutch top sector approach is our Global Innovation Clusters. There would appear to be potential synergies between the Dutch work with innovation adoption in Logistics and the Scale Al Cluster [Government of Canada 2023] activity stream in Al Adoption (Driving adaptation and adoption of Al-powered, intelligent supply chain solutions across a variety of sectors). As noted above in our reviews of initiatives in Finland and Germany, there are also close links between workplace innovation and the digital transformation activities envisioned in the digital technology cluster (especially in health care) and between the human-centred work design activities in the Bridges 5.0 project and the advanced manufacturing cluster's program stream on ground-breaking process transformation.

#### b) Selected regional initiatives

Scotland<sup>5</sup>: The U.K. national government and the regional (devolved) government in Scotland have taken contrasting approaches to policy and programming for support of workplace innovation. "In the U.K. as a

<sup>5</sup> Dr. Peter Totterdill, one of our project team members, was involved in the Workplace Innovation Engagement Program in Scotland but was not a contributor to this section of Annex 3.

whole, the rate at which evidence-based workplace innovation practices are being adopted by enterprises is persistently low, especially in comparison with several other Northern European countries. Analysis of findings from the European Working Conditions Survey suggests that under 20 per cent of U.K. workers are in discretionary learning jobs, less than half that of countries such as Denmark and the Netherlands [Lundvall, 2014]. Other evidence suggests that less than 10 per cent of businesses can be classified as high-performance workplaces, versus about 20 per cent in the EU as a whole)." [Totterdill & Exton 2021] The devolution of certain powers from the U.K. to an elected Scottish Parliament provided the opportunity for a different approach to economic development and industrial policy in Scotland.

"The Scottish Government's Inclusive Growth strategy and its Fair Work Framework were both grounded in a commitment to win-win-win outcomes for companies and people: high levels of economic performance, high quality of working life and a high skill equilibrium in the labour market." [Pot et al 2023] The Fair Work Tool from Scottish Enterprise "aims to balance the rights and responsibilities of employers and workers and generates mutual benefits for individuals, organizations and society, such as increased participation in work; improved productivity in the workplace; wider distribution of wealth within local communities." [Fair Work Employer Support Tool 2023]

The portfolio for Scottish Enterprise, a Non-Departmental Public Body within the new devolved government, included a pilot Workplace Innovation Engagement Program. The following description of the Program and its results is excerpted from the multi-country comparisons in [Pot et al 2023]:

- "The Program was open to all companies with 20+ employees. A cohort of ten companies was recruited by Scottish Enterprise in Autumn 2016, and a second cohort of nine entered the program in September 2017.... [The Program] combined individual learning and competence development with the introduction of workplace innovation practices in the participating companies. It was also designed to create a learning network within each cohort, maximizing opportunities for peer-to-peer knowledge exchange and support, creating a community of practitioners on comparable journeys."
- "Evidence from participants showed that each company made significant process improvements based on employee empowerment, attributable wholly or in substantial part to WIEP. These improvements led to faster throughput time, greater efficiency, more effective problem solving, enhanced competencies and/or greater capacity for innovation."

Other mechanisms to extend the impact of the program were later supported by Scottish Enterprise: hybrid master classes, workshops and grant funding [Totterdill & Exton 2021], before being sidetracked by the twin disruptions of Brexit and the COVID-19 pandemic. Post-COVID, a reduced Workplace Innovation Support program has been maintained by a small group within Scottish Enterprise. However, the larger vision of "a broad movement across Scotland, supported by researchers, social partners and business organizations as well as policy makers" [Pot et a 2023] similar to the vision in Finland has not been restored. In addition, the lack of a strong research orientation within Scottish Enterprise seems likely to reduce the ongoing links required to foster research-to-practice transfer.

**Insights:** The ongoing relationship between the governments of Scotland and the U.K. may have similarities to intergovernmental relations in Canada. This may make it more difficult to achieve the desired "policy ecosystem for workplace innovation...conceptualised, integrated and grounded in a long-term perspective, that will ensure sustained impacts at individual enterprise level and across the economy as a whole," as originally envisioned for Scotland. [Pot et al 2023]

As described in the next section, in our recommendations for *Future Directions* we have focused on regional workplace development agencies in Canada with a long-term focus on both economic and

social well-being and successful track records of garnering support across all levels of government. We have also recommended a living labs approach to encourage ongoing experimentation and research-to-transfer links.

Based on our team's experience with strategic networks in higher education, one other aspect of the Scotland case seemed to be a promising opportunity to be explored further in Canada – as well as Scotland. The Enhancement Themes program in Scottish higher education is highly regarded globally for fostering collaborations across a diverse set of institutions on common themes of importance for Scotland as a whole [Pelik 2023]. Past themes such as graduates for the 21st century suggest that a multi-sector collaboration that included opportunities to explore enabling innovation capability could foster co-operative efforts with regional employers. This is especially interesting considering the initial success of similar collaborations around enabling innovation capability in higher education in Canada – without such a strong historic tradition of successful inter-institutional collaboration.

The Flemish Region (Belgium): Some smaller European countries such as Ireland and Norway have stimulated and resourced workplace innovation programs but did not sustain a continuing effort due to a variety of factors, including changes in government bringing in new political philosophies and priorities. The Flemish Region in Belgium provides an interesting case study of a short-term intervention evolving into reduced governmental involvement with some degree of success.

The Flemish Region, with its 6.5 million inhabitants, occupies the northern, Dutch-speaking part of Belgium as one of three administrative regions of the country. There were three stages in the evolution of workplace innovation policy and program support in the region:

- The Flemish government, under the auspices of the Minister of Work, Education and Training, started a work organization development program, entitled Flanders Synergy, in 2006. This 18-month program was funded through the Flemish allocation under the European Social Fund. In 2008, a new call was launched under the heading of social innovation as a two-year follow-up program with increased financial resources.
  - Initially, Flanders Synergy was a rather small program: the 2006 cohort comprised only 12 company projects. However, it signified an important breakthrough in policy thinking, indicating that, for the first time, organizational innovation was being accepted as a legitimate target of policy intervention and an integral part of the government's regional innovation strategy. [Aloisini et al 2017]
- In the second stage of its evolution, Flanders Synergy operated as a membership organization under a public-private co-operation structure, fostering interaction between companies, social partners, knowledge institutions and certified workplace innovation consultants. The aim was to create innovative and adaptive organizations at the leading-edge of improving quality of work as well as a broad ecosystem for diffusing these experiences. Between 2009 and 2015, about 300 organizations actively participated in the redesign of their structure within this framework. [Alasoini et al 2017]
- The third stage of evolution for workplace innovation policy in the Flemish Region involved the evolution of Flanders Synergy into a private company, Workitects, "a centre of excellence on workplace innovation, grounded in Sociotechnical Systems Design theory." [Dessers & Van Gramberen 2019] Workitects forged links with research institutions in the Flemish Region to ensure that its project engagements benefited from research-to-practice transfer, e.g., with the Work and Organizational Change unit of the KU Leuven, the KU Leuven Institute for Healthcare Policy for a project on rethinking the primary care ecosystem. [Dessers & Van Gramberen 2019]

**Insights:** It is not clear how well this single case can be generalized and how much depends on the strengths and relationships amongst members of this specific regional workplace innovation ecosystem. However, it does suggest that a regional government could foster an effective ecosystem over time which can evolve to secure ongoing support from other general-purpose public sources under at least some circumstances.

Another frequently cited regional workplace innovation program is the Workplace Innovation Platform within the Gipuzkoa Territory in the Basque Country region of Spain. [Pomares 2019a, 2019b, 2020; Pomares et al 2016; Unceta et al 2019] While this has certainly been a successful regional initiative, it is reliant on an underlying social structure and collaboration heritage unique to the region. While research on this region is of interest to researchers studying how distinctive local factors affect workplace innovation policy, we did not find any immediate insights to guide research-to-practice transfer of workplace innovation expertise in Canada.

# 3. Adapting research insights on policy and programs for Canadian contexts

# Connecting the dots: quality of work, employee innovation, economic and social well-being

The European policy initiatives above have highlighted the connection between quality of work and employee innovation at the workplace level and well-being – both social and economic – at the national and regional levels. This has been much less evident in Canadian policy at either the national or provincial levels.

Some recent work has begun to connect more of these elements. For example, research on employers' roles in addressing "persistent social and economic challenges" in Atlantic Canada [Pascoe-Deslauriers 2020] advocates for integrating "the role of employers and businesses and the quality of jobs available in addressing these challenges. Decent jobs have implications for individual, societal and organizational outcomes, including innovative work behaviours...we need to consider job quality and how good quality jobs can support organizational and business innovation outcomes, as part of policy debates for local economic development."

The recent development of an Inclusive Innovation Monitor also holds promise for "tracking growth, inclusion and distribution for a more prosperous and just society" [Munro and Zachariah 2021], and could potentially be expanded with data on quality of work and on organizational capability to support employee-led innovation as is the case in Europe. Initial Canadian research is also appearing regarding the impacts of intentional efforts to foster workforce inclusion in innovation. [Vinodrai et al 2021]

# Policy and programming for workplace innovation and quality of work in Canada's regions

We describe now how some of the insights above from Europe were applied to the two specific developments used in our project report to illustrate potential Future Directions.

Regional workforce development collaborations are a promising level of innovation policy and programs for applying insights on integration, scalability and responsibility for workplace innovation in Canada. In the regional context, there appear to be fewer intergovernmental barriers for collaboration on both

economic and social prosperity, and the key decision-makers in the agencies involved already have direct experiences working together on shared goals.

For example, the Newfoundland and Labrador government recently initiated a network of regional workforce development agencies with enhanced missions to "create and retain a diverse and inclusive, innovative and productive workforce" to address "the health, well-being and economic prosperity of all of our regions." [NLWIC 2021] This initiative is being led by our network partner NL Workforce Development Centre, which has fostered collaborations across regional employers, social sector partners and equity-seeking groups, local governments and numerous provincial-level agencies, including:

- Department of Industry, Energy and Technology
- Department of Fisheries, Forestry and Agriculture
- Department of Immigration, Population Growth and Skills
- College of the North Atlantic
- Atlantic Canada Opportunities Agency

In parallel, NL Workforce Development Centre is using the development and implementation of these committees as a case study of innovative regional workforce development collaborations as a strategic initiative supported by the Government of Canada's Future Skills Centre.

A complementary innovation is underway in the southwestern Ontario region served by our network hub partner WEtech Alliance. Workforce WindsorEssex is partnering with the City of Windsor to take on a new role administering employment services, a joint effort involving the provincial Ministry of Labour, Immigration, Training and Skills Development and the Ministry of Children, Community and Social Services. [Campbell 2023] Workforce WindsorEssex has already brought together a wide range of regional partners to address both economic and social well-being, as well as promoting workforce inclusion and belonging through initiatives such as the Local Immigration Partnership and Empowering Access for Migrant Workers.

Finally, WEtech Alliance has also been instrumental in fostering Scalability by developing a community of practice for workplace innovation catalysts across the regional innovation ecosystem, bringing together cohorts from the automotive, health care and energy industry sectors in addition to public and social sector partners. [WEtech n.d.] As partners in a larger regional workplace innovation collaboration, WEtech will be able to contribute the expertise developed in its innovation catalysts programs while also exploring some of the scenarios for research adaptation to enhance those programs which were created in our 2022-23 project.

# 4. Two new European public policy and program research initiatives of note

Many of the European projects cited above were undertaken with support from EU research initiatives such as Horizon 2020 and Horizon Europe. Since Canada has affiliate status for these research initiatives, Canadian organizations are invited to join in research proposals and have the opportunity to secure funding through Canadian research councils, for example, the <a href="Horizon Global Platform">Horizon Global Platform</a> Competition.

Here are two recent examples of innovative European initiatives where participation of Canadian researchers could strengthen our own innovation policy and programming:

## Innovating through experimentation: The European Commission's new project promoting more experimental innovation policy (launched January 2023)

This activity follows previous efforts to support peer learning of innovation agencies at both national and regional levels across Europe (INNOSUP-5) and improving innovation support for SMEs through innovation policy experimentation (INNOSUP-6). The findings from INNOSUP-6 are reported in [Cuelo 2021] and [Cuelo et al 2022].

The proposed approach "allows for testing of new ideas before scaling up successful solutions and provides valuable evidence on what works, what doesn't work, and why. While this approach has been embraced by other policy fields, it has not yet become widely adopted in research and innovation policy, hindering efforts to further improve Europe's research and innovation performance." [EC R&I 2023]

As a follow-up to our research-to-practice work with policy and program planners in this project, we will be alerting them to this new endeavour in Europe so that we can determine which areas for experimentation in research and innovation policy we should be tracking within this initiative to identify results of value to Canadian policy development.

#### Bridges 5.0: Towards a human-centred, sustainable and resilient economy

This initiative, supported by the Horizons Europe EU research program was listed in the introduction to the project report as the most recent example of high-level recognition for employee-led workplace innovation in the EU. Bridges 5.0 builds on the Beyond 4.0 project supported by the Horizons 2020 program.

Bridges 5.0 is intended to build bridges to accelerate companies transitioning to Industry 5.0. According to the EU's Research and Innovation Directorate [2023], Industry 5.0 is "a vison for European industry that aims beyond efficiency and productivity as the sole goals and reinforces the role and the contribution of industry to society. It places the well-being of the worker at the centre of the production process and uses new technologies to provide prosperity beyond jobs and growth while respecting the production limits of the planet. It complements the existing Industry 4.0 approach by specifically putting research and innovation at the service of the transition to a sustainable, human-centric and resilient European industry."

The Bridges 5.0 leadership team includes many of the pioneers in European workplace innovation research and development such as our project team members Dr. Peter Totterdill, co-founder of Workplace Innovation Europe. They describe the new project as follows:

"Industry 5.0 is...a call for a responsible and sustainable approach to values with the aim of creating sustainably successful innovation ecosystems. Ecosystems that extend far beyond national borders or individual interest groups. Bridges 5.0 is one of the initiatives that makes an important contribution to that. The project builds bridges of knowledge and experience between universities, companies, communities of interest and policymakers on the topic of new skills and competencies in an Industry 5.0 world." [Sorko, 2023]

As a follow-up to the research-to-practice work with employers in this project, we will be approaching Canadian workplaces and networks for whom the results of Bridges 5.0 will be particularly valuable, to develop processes for accelerated adaptation and mobilization of research insights from the Bridges 5.0 program. We will build on our existing links to European research in workplace innovation to enable these research-to-practice processes.

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