



PREPARING FOR JOBS
OF THE FUTURE

—
SE PRÉPARER AUX
EMPLOIS DE L'AVENIR

2018 G7 EMPLOYMENT AND INNOVATION MINISTERIAL MEETING

CHAIRS' SUMMARY

Under Canada's 2018 G7 Presidency, the G7 Ministers of Employment and Innovation convened in Montréal on March 27-28, 2018, under the overarching theme of *Preparing for jobs of the future*. Globalization and emerging technologies are compelling G7 members to understand how the changing economy is impacting industries and workers and how governments can support all of their citizens to adapt and thrive in the new world of work. Discussions emphasized the fundamental shifts in our economy and labour market that these changes represent.

Gender equality and women's empowerment were a key underlying theme of this Ministerial meeting. As persistent gender inequalities in society remain, G7 Ministers stressed the importance of closing the gender gap by encouraging and supporting more women to study and pursue careers in the fields of science, technology, engineering and mathematics; boosting women's participation in the labour market, particularly in leadership roles; and recognizing equality of rights and opportunities for women and men. G7 Ministers further highlighted the importance of integrating gender analysis into government programming and budgeting, and of setting metrics, tracking results and having the right tools to meet the goal of gender empowerment.

As innovations drive our capacity for global growth and prosperity, the nature of work and the requirements for skills are also changing. Our countries are poised to become more productive and competitive, in order to shape a better future for our citizens.

Employment and Innovation Ministers jointly exchanged approaches on preparing for jobs of the future. G7 countries have a key role to play in supporting all segments of their diverse workforce to adapt and transition to the new economy, while meeting industry's demand for skilled workers. By fostering collaboration with the private sector, labour organizations and educational institutions, Ministers will lay the building blocks for growth that includes everyone.

Employment Discussion

Building on the G7 Labour and Employment Ministers' pledge for enhanced cooperation on the issue of the future of work during the 2017 G7 Italian Presidency, Employment Ministers focused their discussions on furthering their understanding of opportunities and challenges of the new economy in G7 countries and the impacts of technological change on different sectors, regions and populations. Employment Ministers discussed

the importance of investing in digital literacy, foundational and social skills; as well as adaptable social protection systems to support those in non-standard forms of work.

Employment Ministers agreed to foster a dialogue among governments, social partners, private sector, and educational institutions to identify proactive measures to support workers through adaptation and transition to the jobs of the future and to foster good quality work environments, including within the digital platform economy.

Employment Ministers recognized that benefits of growth generated from innovation are not shared equally. Removing barriers to labour force participation for underrepresented groups and increasing access to quality jobs, must remain a focus by putting in place policies where everyone has a chance to succeed. Other measures to increase labour force participation should be considered, such as apprenticeship and training opportunities and adult upskilling programs. Additionally, pay equity is key to this goal and in line with the UN 2030 Agenda for Sustainable Development.

Employment Ministers agreed to promote discussions on **tools to address violence and harassment** in the workplace, in order to create safe workspaces and work with stakeholders on gender equality to develop and promote policies that prevent violence and harassment, respond effectively, and support those affected. In addition, G7 Employment Ministers established a time-limited **Employment Task Force** to further our understanding of these issues and provide recommendations, including sharing best practices and possible policy approaches on issues such as how governments can adjust labour market programs, modernise labour standards and social protection systems. The Task Force will include participation from international organizations, labour organizations, business and subject-matter experts, including in the area of gender equality, and be supported by a digital **Future of Work Forum**, which was launched during the Ministerial meeting. Canada will host the first meeting of the Task Force in 2018 under its Presidency.

Canada announced the creation of up to 500 **student work placements** in the field of artificial intelligence (AI) over three years and will explore future opportunities for collaboration with other G7 countries on work-integrated learning strategies and programs.

A full description of the Employment Ministerial outcomes is under **ANNEX A**.

Innovation Discussion

Building on the outcomes of the 2017 Italian ICT (Information and Communications Technology) and Industry Ministers' Meeting on the Next Production Revolution in Torino, Italy the G7 Innovation Ministers turned their attention to the impact of transformative technologies on the economy and society. They discussed what policymakers can do to improve firm competitiveness, stimulate innovation and remove barriers to labour force participation, including for women, so that all members of society can benefit from transformative technologies.

Innovation Ministers focused their discussions on recent advances in areas such as robotics, AI, big data analytics, blockchain and clean technologies, and their potential to significantly improve our standard of living. They reaffirmed their commitment to supporting innovation and the importance of partnering with the private sector to ensure its benefits are enjoyed by all, including women and underrepresented groups. Ministers further agreed on the importance of appropriate and sensible business policies and efficient regulatory environments.

Innovation Ministers expressed a vision of human-centric artificial intelligence, which presents enormous opportunities to positively impact all G7 countries' efforts to stimulate inclusive and sustainable growth and remove barriers to labour force participation, including in key areas such as health, economics, security and governance (**See Annex B**). Ministers noted the importance of government policy in stimulating innovation (**See Annex C**) through investing in collaborative innovation ecosystems; improving access to capital and adoption of technology for SMEs; supporting significant investments in R&D; enabling firms to tap into global talent pools; streamlining government programs; developing online platforms to support entrepreneurship; using government procurement to foster Micro, Small and Medium Enterprise (MSME) innovation; refocusing investment in science, research and technology; promoting cyber-resiliency in value chains (particularly among MSMEs); and, especially, labour force training and skills development.

To advance their shared understanding of how best to seize the opportunities presented by AI, G7 Innovation Ministers decided to convene a multi-stakeholder conference on AI, to be hosted by Canada in the fall of 2018. Canada will strike a time-limited working-group to advance the efforts and objectives of the AI statement and prepare for the conference. This conference will bring together stakeholders including government, academics, specialists, and private sector partners to discuss future economic, legal, social, and ethical issues relating to the development and deployment of AI and how to harness the potential of this transformative technology to break down barriers to labour force participation. Further, recognizing that opportunities presented by AI demand a multi-stakeholder approach, Innovation Ministers endorsed multi-stakeholder dialogue and collaboration on AI.

Employment and Innovation Ministers also recognized the importance of social dialogue, appreciated the input of key stakeholders to their discussions, and were grateful to the OECD and the ILO for their collaboration and support of our work. Finally, Ministers look forward to the French government assuming the 2019 G7 Presidency and to continue working together.

2018 G7 EMPLOYMENT OUTCOMES

To support our efforts to prepare for the jobs of the future, it is proposed that the G7 Employment Ministers implement an integrated strategy that:

- Positions G7 countries to respond to the opportunities and challenges of the future of work;
- Launches a digital tool to support effective collaboration among G7 countries;
- Promotes women's economic empowerment;
- Sustains the dialogue into the future; and
- Demonstrates leadership to prepare the next generation of workers.

1. POSITIONING THE G7 FOR THE FUTURE OF WORK

G7 Employment Ministers established a time-limited G7 Employment Task Force to undertake targeted research, analyses, and make recommendations on priority issues for G7 countries related to the future of work.

The Task Force will be composed of G7 government members, and as appropriate, will include participation from international organizations, labour organizations, business and subject-matter experts, including in the area of gender equality, who will be invited to contribute to advancing dialogue, developing a body of knowledge and formulating policy recommendations. The Task Force will report on its findings to the Presidency as appropriate, and could make use of the G7 Future of Work Forum to share information.

The Task Force's deliverables would be to:

- a. Advance a dialogue on the impacts of changing forms of work, and especially on women and underrepresented populations, and opportunities in specific sectors;
- b. Exchange data collection methods and discuss definitions and measures related to changing forms of work to allow a better understanding of trends and challenges, forecast in-demand skills, and identify targeted actions, including to address disruption and innovation;
- c. Share best practices and identify possible policy approaches on how governments can adjust labour market programs;
- d. Share best practices and identify possible policy approaches on how to modernise labour standards and social protection systems, including to provide workers in different forms of employment with supports that are appropriate for the new world of work;
- e. Share best practices and identify policy approaches to assist individuals in making the transition and adapting to changes in the labour market.
- f. Assess and analyze government-produced data, including identifying data gaps, as well as identify engagement opportunities with the private sector to extract data on issues such as:
 - work in the platform economy

- education and skills development of women and girls, particularly in relation to STEM; and
 - gender pay gap and work life balance.
- g. Exchange ideas on how forms of collective representation respond to the changing nature of work.

The Task Force would begin its work under the Canadian Presidency with a meeting in the fall 2018.

2. LAUNCHING A DIGITAL TOOL TO SUPPORT COLLABORATION

Public launch of the G7 Future of Work Forum

Building on the outcome of the 2017 G7 Italian presidency, Employment Ministers publicly launched the G7 Future of Work Forum. The Forum is hosted by the Organisation for Economic Co-operation and Development with the input and support from the International Labour Organization (ILO). The Forum:

- is a key tool that supports the work of the G7 Employment Task Force and fosters evidence-based decisions and concrete actions.
- allows G7 countries to present the latest information on policies and programs focused on preparing for the jobs of the future.
- includes a community page for countries to engage in internal discussion and communicate in real-time.
- includes a public facing page highlighting key policy and program tools. For example, it could include labour market information to assist workers to transition to jobs of the future.

3. PROMOTING WOMEN'S ECONOMIC EMPOWERMENT

Promote domestic and international tools to address the issue of violence and harassment in the workplace

There is mounting international awareness of, and calls for action to address, violence and harassment in the world of work. Recent movements have highlighted the prevalence of harassment and violence in the workplace, especially against women and gender minorities. There is a critical need for policies to prevent violence and harassment, to respond effectively, and to support victims, survivors and employers; recognizing that the UN 2030 Agenda for Sustainable Development encourages all of us to eliminate violence against women and girls.

The ILO is leading efforts internationally to address the issue, including through the development of an international standard addressing violence and harassment in the workplace. The OECD also issued a progress report on the implementation of the Gender Recommendation and the focus on policies to combat violence against women. G7 countries welcome these discussions and encourage governments to work with labour organizations, businesses, civil society, and experts on gender equality to develop and promote policies that prevent violence and harassment, respond effectively, and support those affected. To examine how different groups of people may

experience violence and harassment, policies could take into consideration areas of discrimination, for example gender, race, ethnicity, religion, age and disability.

Engaging in this analysis and outreach will advance discussions on tools available to governments and the private sector to address violence and harassment in the workplace, and could contribute to best practices in the G7 Future of Work Forum. This dialogue and development of policy tools will be an important step towards realizing economic empowerment of women.

4. SUSTAINING THE DIALOGUE

To ensure that the dialogue on preparing for jobs of the future continues, Canada proposes to host a conference with domestic partners on the future of work

Canada's focus on preparing for the jobs of the future will culminate in a conference with Canadian stakeholders (employers, educational institutions, unions, provinces and territories) to build on the outcomes of the G7 Employment Ministers' discussions. This will allow continuing the dialogue at the domestic level to better position Canadians to be prepared for the opportunities and challenges that come with the future of work. The conference will engage the Gender Equality Advisory Council to enrich conversations on efforts to close the wage gap. In the spirit of our commitment to Open and Transparent Government, Canada will demonstrate leadership and encourage other G7 countries to continue to engage their domestic partners in similar discussions.

5. DEMONSTRATING LEADERSHIP

To prepare the next generation of workers

Over the next three years, the Government of Canada will invest \$3M to support the creation of up to 500 new student work placements in the field of AI. This initiative will promote gender equity in emerging and increasingly important fields like AI by offering employers enhanced wage subsidies of up to 70% of wages (up to a maximum for \$7,000) for student work placements created for women and other underrepresented groups. This initiative will build on existing partnerships with information technology organizations such as the Information Technology Association of Canada (ITAC) and/or the Information and Communications Technology Council (ICTC), the leading organizations in AI across Canada.

Canada will explore future opportunities for collaboration with other G7 countries to share expertise and experience in developing and implementing work-integrated learning strategies and programs. Canada will explore possibilities to have a reciprocal exchange among G7 countries in the fields that are critical for preparing for jobs of the future.

G7 Innovation Ministers' Statement on Artificial Intelligence

Artificial intelligence (“AI”) represents a set of complex and powerful technologies that will touch or transform every sector and every industry and will help society address some of our most challenging problems. Moreover, the productivity gains from AI technologies are expected to be substantial. Innovations in AI technologies have the potential to introduce new sources of economic growth especially in countries struggling with an aging population or economies highly dependent on traditional levers of production, including by helping overcome hurdles to full participation in the workforce and in our societies. Realizing the broad potential of AI technologies will require thoughtful investments in entrepreneurialism, education, and the labour market to promote relevant skills and knowledge to participate in jobs of the future¹ and to adapt to changes in demand for skills.

At the G7 ICT and Industry Minister’s Meeting in Torino, Italy, under the G7 Italian Presidency in 2017, Ministers of G7 countries expressed a vision of human-centric AI for innovation and economic growth.

Preamble

We, the Innovation Ministers of the G7, met in Montréal, Québec from March 27-28, 2018. In:

- REAFFIRMING our commitments set out in the *Ministerial Declaration on the Digital Economy: Innovation, Growth and Social Prosperity* (“Cancún Declaration”) organized by the OECD ;
- ENDORSING the policy pillars and key policy priorities identified in the *G7 People-Centered Action Plan on Innovation, Skills and Labor*;
- CONFIRMING our resolve to contribute towards multi-stakeholder dialogue in the *G7 ICT and Industry Ministers’ Declaration: Making the Next Production Revolution Inclusive, Open and Secure (2017)* (“Torino Declaration”), with particular regard to *Annex 2, G7 Multistakeholder Exchange on Human Centric AI for our Societies*, reiterating the principles enumerated in the Torino Declaration which we believe underpin growth in the global digital economy, and taking note of the *Chair’s Summary of the Innovators’ Strategic Advisory Board on People-Centered Innovation to G7 Leaders*;
- BUILDING ON the debate initiated by the 2016 G7 ICT Ministerial in Takamatsu, national and international events that have been held to foster exchange of views (for example “A.I. R&D Guidelines” organized by the Conference of Advisory Experts of Japan’s Ministry of Internal Affairs and Communications);
- REAFFIRMING the *G7 Ministerial Meeting on Gender Equality Declaration of the Ministers* in Taormina in 2017 and recognizing that gender equity is a key component of a strong economy and progressive society,

¹ Brookfield Institute for Innovation + Entrepreneurship, [The Talented Mr. Robot: The Impact of Automation on Canada’s Workforce](#) (2016) at p. 22.

the Innovation Ministers of the G7 seek to build upon the common vision of human-centric AI, a vision which requires care in the development and deployment of this promising technology. With reference to the G7 ICT Ministerial in Japan in 2016 and the G7 ICT and Industry Ministerial in Italy in 2017, this year, G7 members shine a spotlight on the interconnected relationship between supporting economic growth from AI innovation; increasing trust in and adoption of AI; and promoting inclusivity in AI development and deployment.

Supporting economic growth from AI innovation is about using AI applications to help improve economic performance. AI is expected to generate trillions of dollars in the global economy annually by as early as 2030.² G7 countries recognize that market-led AI innovations will positively impact all of our countries in key areas such as health, the environment, transportation, manufacturing, agriculture, security and governance. These gains will be realized through policies that foster entrepreneurship in AI technologies, that prepare people for social and labour market demand changes, including those who are at risk of being left out, as well as policies that build open and fair market environments, including the promotion and protection of free flow of information. This approach includes opposition to data localization requirements that are unjustifiable, taking into account legitimate public policy objectives, as well as generally applicable policies that require access to, or transfer of, source code of mass market software as a condition of market access, while recognizing the legitimate interest of Governments in assessing the security of these products. Such an approach creates a business environment that invites innovation while providing predictability in commercial relations, including in law.

Increasing trust in and adoption of AI are necessary ingredients for economic growth and the fuel for future innovations that can benefit society as a whole. G7 members recognize that trust and adoption can be encouraged through a robust multistakeholder approach involving: education initiatives and public awareness of the benefits of AI technologies; increasing the participation of women in the workforce; promoting safe and reliable AI applications in the marketplace; giving early considerations to impacts on citizens, including through respecting privacy as a fundamental value and respecting applicable frameworks for privacy and data protection; mechanisms to ensure the accountability of AI systems; enabling industry-led processes to promote safety and vigilance in design and implementation of AI systems; efforts to prevent the misuse of AI applications that could cause harm; initiatives, notably those led by industry, that promote guidance on human intervention in AI decision-making processes, among others.

Promoting inclusivity in AI development and deployment is critical to ensuring broad public support for AI adoption and ensuring all members of society can benefit from this technology. G7 members endorse efforts, notably those led by industry, towards multi-stakeholder engagement on AI technologies by bringing together industry,

² PricewaterhouseCoopers, [Sizing the Prize: What's the Real Value of AI for Your Business and How Can You Capitalise?](#) (2017) at p. 3.

governments, academia and civil society, including social groups representing diverse, traditionally underrepresented populations such as women, LGBTQ, ethnic and religious groups, persons with disabilities, seniors and youth, and indigenous persons. These types of engagements can help to create more representative and useful AI systems that will be relevant and responsive to society as a whole, and fuel innovation from all parts of the citizenry.

To make advances in each of these related areas, G7 members will endeavor to:

- invest in basic and early-stage applied R&D to produce AI innovations, and support entrepreneurship in AI and labour force readiness for automation through: international academic exchanges; exchanges of professionals; knowledge and skill development; investments in lifelong learning; guidance and employment services; access to capital; incentives for small and medium-sized enterprises to pursue AI innovations; removal of unjustifiable administrative and regulatory barriers for applied AI; and, facilitation of national and international business networking and collaboration opportunities. Share best practices between G7 countries.
- continue to encourage research, including solving societal challenges, advancing economic growth, and examining ethical considerations of AI, bias in datasets, bias experienced through interacting with AI systems, as well as broader issues such as those related to automated decision-making; communicate and promote multistakeholder dialogue on the results of the research to all stakeholders, including community groups, market actors and other governments.
- support public awareness efforts to communicate actual and potential benefits, and broader implications, of AI.
- as a means to promote human-centric AI and commercial adoption of AI, continue to advance appropriate technical, ethical and technologically neutral approaches by: safeguarding privacy; investing in cybersecurity, the enforcement of applicable privacy legislation and communication of enforcement decisions; informing individuals about existing national bodies of law, including in relation to how their personal data may be used by AI systems; promoting R&D by industry in safety, assurance, data quality, and data security; and exploring the use of other transformative technologies to protect personal privacy and transparency.
- support the free flow of information through the sharing of best practices and use cases on the provision of open, interoperable and safe access to government data for AI programming, support approaches to improve the quality of datasets, and promote international cooperation in data sharing, protection. Furthermore, we support industry-led voluntary international technical standards, developed in an open, transparent and consensus-based manner and in market-led approaches to promote interoperability.
- disseminate this G7 statement globally to promote AI development and collaboration in the international arena.

Next Steps

Going forward, the Innovation Ministers of the G7 decided to:

- further the efforts and objectives of this Statement;

- facilitate multistakeholder dialogue and collaboration on artificial intelligence to inform future policy discussions by G7 governments, supported by the OECD in its multistakeholder convener role; and
- convene a multistakeholder conference on AI hosted by Canada in the fall of 2018, supported by the time-limited innovation working group, at which the work of multistakeholder exchanges may be presented, and where parties will further discuss how to harness the positive transformational potential of AI to promote inclusive and sustainable economic growth.

G7 Innovation Ministers' Statement on Stimulating Innovation

The G7 Ministers of Innovation met in Montréal, Québec on March 27-28, 2018 to further our dialogue and cooperation on approaches to spur innovation and elevate the growth trajectory of our nations. This is our opportunity to deepen collaboration, learn from each other's experiences, and exchange examples of innovation initiatives, case studies, and best practices. To this end, we have identified four interconnected and mutually reinforcing themes to stimulate innovation:

Skills and Talent: The Common Trait of Innovation

Fostering innovation and entrepreneurship requires an emphasis on skills development and training for the labour force of tomorrow. This requires a new mindset of continuous learning which starts in school but also includes continual up-skilling and re-skilling to ensure that our workforce is ready to fill present skills gaps and is able to grow into the jobs of tomorrow.

G7 members shared the following innovation initiatives, case studies, and best practices:

- The **UK's** commitment to test ambitious new approaches to lifelong learning through different approaches to help people to retrain and upskill throughout their working lives. The UK Government has announced the rollout of a National Retraining Scheme which includes testing the use of AI and innovative EdTech in online digital skills courses so that learners can benefit from this emerging technology, wherever they are in the country.
- **Canada's** efforts, through its Global Skills Strategy, to enable firms to tap into global talent pools and recruit highly skilled individuals from abroad and attract the talent they need to succeed in the global marketplace. In addition, Canada established six sector-specific Economic Strategy Tables to identify specific challenges and opportunities for innovation, including skill demands. To meet the demand for these new skills, Canada has launched the Skills Boost Initiative, providing adult learners who are looking to return to post-secondary education to upgrade their skills with enhanced access to student financial assistance and EI flexibilities. There are also targeted initiatives to support women and underrepresented groups (e.g. Indigenous peoples, low-income Canadians, people with disabilities and seniors) by providing them with training and support to maximize their participation in the digital economy.
- The Digital Skills and Jobs Coalition in the **European Union** brings together Member States, companies, social partners, non-profit organisations and education providers, who take action to tackle the lack of digital skills in Europe. In this framework, the European Commission has recently launched a pilot project to financially support cross-border apprenticeships (the "Digital Opportunities" initiative).
- Tax credit for companies in **Italy**, for the training of employees on Industry 4.0 technologies together with the financing of Technical High Institutes conferring

high tech specialisation to the next-generation labour force, through the promotion of a teaching methodology based on practical experience.

- **Germany's** 'Mittelstand 4.0' Competence Centres providing a wide range of awareness raising, information, testing and training programmes on digital technology, focusing on SMEs. Additionally, the Industrie 4.0 platform develops recommendations for new training methods and presents best practice examples showing how employers and employees work together. In the area of continuing education, the employers and employees have already developed a number of solutions together. These are being used in companies, teaching factories and vocational schools. To ensure that young people acquire the skills they need in the future world of work, the curricula of the dual vocational training system are continuously updated in cooperation with all of the stakeholders.
- The Grande Ecole du Numérique in **France**, a network of free and short digital training programmes with no requirement for prior degrees, specifically targeting the youth, which aims at training 10,000 persons within 200 certified programmes by the end of 2018. One hundred seventy training programmes have been certified so far.
- To follow changes of labour needs of industries dealing with AI and data-related technologies, **Japan** is upgrading and expanding human resource development tools such as the skill standards for IT professionals and the qualification system for IT engineers. Furthermore, Japan established an accreditation program for private IT-skill training courses to meet the 4th industrial revolution and enable workers who complete the training program to acquire certification.

The above demonstrates that G7 countries recognize that education and workforce development must follow the changing needs of industry.

Technologies and Breakthroughs: The Inflection Point of Transformative Capabilities

Scientific discovery and technological breakthroughs are the primary sources for expanding the frontiers of human knowledge and for responding in innovative and practical ways to the challenges and opportunities of the 21st century. We need to highlight the importance of transformative technologies to elevate the competitiveness of established and emerging firms, industries, and clusters.

G7 members shared the following innovation initiatives, case studies, and best practices:

- An investment of \$950 million over five years to support five business-led **Canadian** Innovation Superclusters, which will be matched dollar for dollar by the private sector and is expected to create more than 50,000 middle-class jobs and grow Canada's economy by \$50 billion over the next 10 years.
- **France's** recently launched "*fonds pour l'innovation de rupture*", a 10B € fund for innovation and industry which aims at financing breakthrough innovation and at investing in disruptive technologies with a specific focus on critical sectors (Artificial Intelligence, cybersecurity, mobility and health).

- **Germany's** Central Innovation Program (ZIM) which offers grants for R&D projects, in particular for co-operations between businesses and research institutes. Bilateral agreements stimulate international research co-operations for the benefit of SMEs. The cluster and network activities, which form an important part of the innovation system: The Leading-Edge Cluster Competition with public funding of 600 million and a total project budget of 1.2 billion Euros successfully supports top-performing innovation clusters, bringing together partners from science and industry (including SMEs) under a common strategy.
- The holistic approach taken by the **United States** which provides multiple forms of support for innovation. For example, the National Science Foundation (NSF) supports the Industry-University Cooperative Research Centers (IUCRC) that help build long-term partnerships among industry, academia and government to build innovative capacity and expand the national research enterprise as well as the Innovation Corps (I-Corps™) that helps researchers develop technologies, products and processes from scientific discoveries.
- The promotion of holistic policies in **Japan** such as “Society 5.0”, “Connected Industries” and “Change by TECH” to create added value and new business models by fully utilizing transformative technologies to solve social challenges and realize economic and social prosperity. Japan also promotes the provision of competitive funding of R&D activities, including financial support for ambitious technical challenges with the potential to generate disruptive innovation, and for start-ups and university spin-offs commercializing new technologies.
- The pilot **European Innovation Council (EIC pilot)** brings together several innovation schemes to provide support with no thematic restrictions to innovative firms and entrepreneurs with the potential for rapid scale-up. It is particularly aimed at companies who have ideas that could lead to products or services radically different to those on the market or under development, are highly risky, and require significant investments.
- Promoting knowledge-intensive investments in **Italy** such as Enterprise 4.0 which offers an incremental tax credit on R&D expenditure, robust deductions on IP-related income and a “super-depreciation” scheme to make more favourable the purchase of new machinery, especially instrumental goods that fit the Industry 4.0 paradigm.
- The **UK's** Industrial and Digital Strategies, which set out our ambition of building an economy which works for everyone – delivering high wages, high skills, high productivity and creating the conditions for competitive, world leading businesses right across the UK. We are stepping up to back business to invest for the long term, to build on the UK's strategic strengths and tackling our weaknesses. The Digital Strategy applies these principles to the digital economy. It is about backing our world-leading digital sectors and promoting digitally-driven productivity growth across the rest of the economy, while also ensuring that everyone, in every part of the UK, benefits from the digital revolution.

G7 countries understand that risk taking can lead to benefits that accrue to all and that assistance should be given to those willing to do the work to turn ideas into the next generation of transformative innovation.

Growing Innovative Companies: A Conduit to Better Jobs

Today's companies are competing in a global marketplace even if they don't realize it. They need tools, supports, and predictable business environments to enable them to invest and rapidly adopt new technologies to remain competitive and grow.

G7 members shared the following innovation initiatives, case studies, and best practices:

- Digital Innovation Hubs in the **European Union** which allow companies to experiment with innovative ICT technology and, if successful, help them to find financing for follow up investments. The hub can also train and reskill the employees of the company to work effectively with the new innovations.
- Launching a new Women Entrepreneurship Strategy in **Canada** to help women entrepreneurs grow their businesses with access to financing, talent, networks, and expertise and making more capital available to SMEs through the Business Development Bank of Canada's programming as well as the Venture Capital Catalyst Initiative. Also, the new Innovative Solutions Canada initiative which looks at how the federal government can act as a first customer to test and validate Canadian technologies.
- Helping SMEs that lack preparedness to innovate in **Germany** by providing assistance in acquiring relevant competences and capacities. Programs like the Go-Inno and Go-Digital provide counselling directed at increasing firms' know-how in innovation and digital matters. Similarly, Germany's "Mittelstand 4.0 – Digital Production and Work Processes" supports SMEs and craft trades in the digitalisation, networking and introduction of industry 4.0 applications. The "KMU-innovativ" initiative is aimed at strengthening the potential for innovation among small and medium sized enterprises. Funding is open to cooperative high-risk industrial research projects and takes place within broader research communities thus increasing mutual learning and spill-over effects.
- Promoting the use of information technology (IT) in MSMEs in **Japan** by building a system to provide them with information on efficient IT tools as well as by setting up a nation-wide network of companies and organizations to support MSMEs through "Smart Manufacturing".
- Promoting a national network of publicly-selected and funded sector-specific Competence Centers in **Italy**, that can support firms, especially SMEs, by providing assistance and contributing to the development of industrial and experimental projects. These Centers complement the "greenfield" educational activities carried out by Digital Innovation Hubs, spreading awareness of Industry 4.0 technologies and spurring digital transformation.
- The **UK's** Digital Strategy which includes a pillar that covers Digitisation of Business – helping every British business become a digital business. The UK announced a Business Basics pilot to support SMEs with the potential to improve their productivity, but lack the management capacity, practical resources or capability to adopt productivity-boosting technologies. In January the UK published the Digital Charter to make the UK both the safest place to be online

and provide businesses with a framework that allows clarity and stability under which industry can flourish.

- The **French Tech** initiative which certifies startup-friendly territories in order to support startups' growth and their international development, this initiative includes territories in every G7 country. The "Structuring Projects for Competitiveness program brings together public companies and public research organizations to develop innovative products, processes, or services that are not available on the market while providing local benefit. France also provides support for the digitalization of SMEs.
- Supporting small businesses developing next generation technologies through the Small Business Innovation Research and Small Business Technology Transfer (SBIR/STTR) programs in the **United States**. The SBIR/STTR programs provide funding for early-stage R&D across a variety of mission areas, from health and agriculture to energy, defense, and more, fueling the commercialization of Federal investments in R&D for innovators and entrepreneurs across the United States.

G7 countries recognize that SME growth drives prosperity and that the integration of transformative technologies is required across all businesses to maintain competitiveness.

Ease of Doing Business: To Foster Entrepreneurship

Effective policies for innovation rely on a sound business environment that encourages investment in technology and R&D and embolden innovative firms to experiment with new ideas, technologies, and business models without the fear of being stigmatized when experiments don't succeed. It also requires streamlining many of the hurdles that entrepreneurs must navigate in order to free themselves to focus on their goals.

G7 members shared the following innovation initiatives, case studies, and best practices:

- Launching **Innovation Canada** to provide a single point of contact for innovators and entrepreneurs looking to grow their businesses. This innovative interface is an entrepreneur's gateway to government programs and services and a historic reform and simplification of business innovation programs. Total overall funding will increase, and the reform will see a reduction in the total number of business innovation programs. This will consolidate and streamline the suite of programs to be client-centric, easy to navigate, and ensure that programs offer the best support to innovators.
- Undertaking regulatory reforms in **Japan** to facilitate the deployment of pilot projects that rely on AI and IoT technologies and making efforts to improve the international business environment by working with like-minded countries to ensure the free-flow of data, prevent data localization and prohibit compulsory access to, or transfer of, source code.
- Taking a holistic approach to policy making for innovative entrepreneurship in **Italy** through the "Italian Startup Act". Innovative start-ups benefit from legal facilitation (for example their digital incorporation) covering each phase of the

business life-cycle and receive support during interactions with others in the innovation ecosystem, such as incubators, VCs, and established companies.

- Continuing **Germany's** EXIST programme and the High Tech Founders Fund which provide financial help and assistance to start-ups and young companies when outsourcing ideas from universities to businesses.
- The **European Union's** Digital Single Market (DSM) strategy, which aims to reduce regulatory and non-regulatory barriers to cross-border adoption and deployment of digital technologies across all sectors – public and private. The DSM is embedded in broader economic and societal needs. The European Council is also proposing an EU Blockchain Partnership to promote a coordinated approach, focused on public sector use cases towards a new generation of more effective public sector services for businesses, citizens and administrations.
- Efforts to simplify the regulatory framework for entrepreneurs and companies are being pursued in **France**. One such effort is a draft law being debated which eliminates sanctions for good faith errors (“droit à l’erreur”).
- The **UK's** Industrial Strategy which committed to develop an agile approach to regulation that promotes and supports innovation and ensures effective protections for citizens and the environment. To support this, the Department for Business, Energy and Industrial Strategy will launch a £10m Regulators' Pioneer Fund in 2018 to support regulators to develop innovation-friendly approaches to emerging technologies.

Streamlining interactions between businesses and governments to ease burdens is a goal we all share and are taking positive steps to ensure that launching and growing businesses is simplified.