

**Presentation to House of Commons Standing Committee on Human Resources,  
Skills, Social Development and the Status of Persons with Disabilities**

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## CHECK AGAINST DELIVERY

Thank you for the opportunity to appear today.

Engineers Canada is the national body that represents the provincial and territorial regulators of the engineering profession.

Canada's engineering regulators license 270, 000 engineers across the country, in all disciplines. This group of qualified professionals includes engineers-in-training just starting their careers, mid-career license holders juggling work and family, and professional engineers contemplating retirement.

The regulators help keep Canadians safe by making sure that licensed engineers are held to the highest standards of engineering education, professional qualifications, and professional practice.

Engineers Canada's most recent labour market study shows that in most jurisdictions, there will be shortages of engineers with 5 to 10 years of experience or specialized skills, while new graduates from engineering programs may have difficulty finding jobs between now and 2020.

This shortage could have an impact on economically significant industries including public infrastructure, natural resources development, manufacturing, general construction, and research and development.

Today, I would like to focus on three recommendations that I believe should form part of how the federal and provincial and territorial governments move forward as they negotiate and implement labour market development agreements and labour market agreements.

The smooth implementation of programs like the Canada Jobs Grant have the potential to address employer's needs and ease a serious skills mismatch in professions like engineering.

Every year, we survey students who are at the end of their bachelors of engineering.

Almost 80% of the 12,000 engineering graduates want to immediately join the workforce as engineers, but employers are looking for specialized engineers with 5 to 10 years' experience. To become a professional engineer these graduates require four year of work experience. The result is a group of talented, disappointed graduates, and frustrated, under-resourced employers.

We are told that employers are hesitant to invest in the training required to develop the skills and specialization they want. Employers are looking to fill the gap at the top of the ranks, and even though more and more students are pursuing engineering, they do not meet employers' current needs.

The Canada Job Fund and Canada Job Grant are a step in the right direction, but must consider going beyond its current focus on small and medium business, short-term training, and considerable emphasis on trades and college-level training.

Secondly, the employment benefits and support measures that are the current focus of the labour market development agreements need to be evaluated to ensure they are providing the right training. This may mean looking beyond trades, and apprenticeships and looking at how to incent engagement in high-skilled jobs such as engineering for those with the required academic credentials who find themselves un-employed.

Another aspect is helping to make sure that the design of either the employment benefits under the Labour Market Development Agreements or other employment insurance benefits are not a disincentive to long-term employment or long-term investments by the employer.

One suggested change to the broader employment insurance regime, proposed by the Women in Engineering and Geoscience Task Force of APEGBC, are adjustments to how employment insurance for parental and maternity leave is structured. Allowing new parents to voluntarily maintain a certain level of engagement with their job without penalty can promote retention in the profession, and with a specific employer. Over time, this can make any dollars an employer spends on training an employee a better return on their investment.

Finally, Engineers Canada believes that another aspect of addressing unemployment and skills mismatches and shortages is to get the right people into the right careers from the get-go. Even with approximately 70, 000 undergraduate students in accredited engineering programs across Canada, we still need more.

Between now and 2020, approximately 95, 000 engineers could fully or partially retire, and an estimated 16, 000 new engineering jobs will be created.

We need focused attention by the profession, employers, academia and governments now to keep our economy growing. For our part, Engineers Canada is launching new tools to help prospective and current engineers succeed and better understand the skills and attributes they need to participate fully in the engineering economy.

Our CareerFocus assessment, to be fully launched this fall, will allow potential and current engineering students to assess their ability to succeed in engineering, and will be able to identify strengths and areas of improvement that they may bring to an employer.

Now is also the time for employers to provide more information to universities, colleges, provincial and territorial governments about what they need from their employees.

In a recent conversation I had with an employer, they indicated that they need their engineers to have not only technical competency, and analytical skills, but also better writing and stakeholder management skills. This kind of information is invaluable.

As part of the agreements between provinces and territories and the federal government, Engineers Canada recommends that data collection from all participants be improved, especially employers. That information must be made available to academia, professions, employers, provincial and territorial ministries of education and policymakers in skills, immigration, education, and economic development.

Thank you again for the opportunity to speak with you today. I would be happy to take any questions you may have.