Mr. Chairman, Excellencies, Distinguished Delegates,

- It is a great pleasure and honour for me to be here today to participate in this session. I would like to warmly thank our Kazakhstan partners for hosting this Conference and thereby creating this opportunity to have a dialogue on such an important matter. Please note that I am here both as the Chair of the UNECE Steering Committee on Education for Sustainable Development and as the Canadian delegate representing education in Canada.

- In my view, and I am sure you feel the same way, each of us is doing what we can to make our economies green is of the utmost importance. In fact, it is essential that we do this if we are to leave the best possible world for our kids. And by best possible world I mean a world that is as democratic, socially just, economically efficient, and ecologically sustainable as we can make it.

- Hence, today, I would like to share a few thoughts with you about what could and should be the role of education in making this kind of world possible. In particular I would like to talk about the role of vocational education in high schools in successfully transitioning to a green economy. And by a green economy I mean one that is entrepreneurial and efficient, creates jobs for everyone, ensures that all have some basic standard of living, and is ecologically sustainable.

- As we know there is the growing demand for green skills throughout most economic sectors. This demand will only grow as the imperative to be green grows and the technology that allows for green ways of producing the things we need, and want, improves. And the technology will continue to improve. In fact it is improving every day.
Those in the private sector will keep developing products and ways of making those products that will meet consumer expectations for a sustainable future. Those in the public sector need to invest public funds in public goods and services that will promote sustainable choices by citizens and consumers. Hence one of the challenges is for the private and public sectors to find ways to work together to ensure that we are educating our youth for the employment and entrepreneurial opportunities that will be there in a green economy that will be part of their sustainable future.

As an example, in 2009 the government of Ontario, the largest province in Canada, passed the Green Energy Act (the GEA for short) stating that "Building a stronger, green economy with lasting well-paying jobs for Ontarians is a key goal of the GEA". To support this legislation a number of programs and supports for businesses and consumers have been put in place to encourage low carbon, energy efficient and environmentally friendly production and consumption decisions that are intended to build a green economy, better protect the environment, combat climate change, and create "a healthier future for generations to come".

As we transition to a green economy additional jobs will be created, some employment will be substituted. Certain jobs may be eliminated without direct replacement and many existing jobs will be redefined. As a recent report by the International Labor Organization has shown, skills shortages already pose a major barrier to green transitions and job creation. To respond to those far reaching changes, education must take the lead.

This means that education must, to the extent that it can, identify the existing and future skills that will be needed and then put in place the educational opportunities that will ensure an adequate provision of these skills. As experience has shown, however, this is much easier said than done. Knowing this thus raises the question of how to proceed. I believe that we must proceed based on a continuous dialogue, a dialogue between
educators responsible for providing education, businesses and industries trying to develop green products and production methods, policy-makers trying to determine where to invest precious public resources, labour organizations trying to support their members, and parents and citizens who want to leave a sustainable world for the next generation. This dialogue will be difficult but it is essential. Let’s do it respectfully and with shared purpose in mind.

**What does this mean for education, particularly vocational education?** Let me suggest three things. First, that we much be teaching students in vocational education about the importance of moving to a green economy. They must know why this is essential and believe in the effort. As David Suzuki and David Boyd note in their 2008 book called Green Guide: how to be a green citizen, “Knowledge plus motivation equals action”. This means understanding vocational education in the broadest of senses as well as acquiring the practical skills that will be needed. Second, educators and policy-makers need to know what is going on in industry. They need to keep up with who is doing what that is green, and what skills are required now and likely to be required in the future in a green economy. Third, policy-makers must make sure they are working with educators to ensure the best possible support is in place for educators to be able to provide the knowledge and skills students, as future employees and entrepreneurs, are going to need in a green economy. And fourth, we must continue to impress upon all, particularly parents and students, the value of a vocational and skills-based education.

- The UNECE Strategy for ESD, which is the regional implementation pillar of the UN Decade for ESD, offers a powerful framework for promoting sustainable development through all forms of education. Under its umbrella, the majority of UNECE countries has accomplished or is close to finalizing and putting in place policy, regulatory and operational frameworks that support ESD. A good practise collection on education for sustainable consumption and production as well as for sustainable transport has already been carried out. In order to further promote key themes and learning outcomes that are vital to a green economy, a
strong effort should be made to link the work on Education for Sustainable Development in the areas of vocational education to the green economy process. The UNECE Steering Committee on ESD is committed to doing this.

- In Canada, education is the sole responsibility of provinces and territories. There is no federal or national ministry of education. The organization that represents the ministries of education in the provinces and territories, called Council of Ministers of Education, Canada has identified ESD as a priority action area. In Manitoba, the province I am from, we have for a number of years been trying to enhance the status and opportunities in the area of vocational education. Recently we have declared that learning to live and work in a sustainable manner is to be a major focus in vocational education. This focus is being reflected in the development of vocational education curriculum, the kind of partnerships with business and industry that we are seeking, the kind of new equipment we are buying, and support for various vocational education learning projects with a strong sustainable focus. We are also of course continually trying to learn from the experience of others such as Germany, Sweden and China.

- Please allow me to conclude by assuring you that I do not believe education is the silver bullet for greening the economy but it is one of the most important pieces in the puzzle. Education matters for achieving a green, inclusive and competitive economy. Green policies and approaches have to feature education components because knowledge, skills and motivation are obviously the decisive factors at play when people make decisions. Let us all do what we can to ensure that our kids are prepared and equipped with the knowledge and skills they will need make the right decisions for themselves and our grandchildren.

- Thank you for your time and attention.