

**U.S.-Canada-European Commission Trilateral Roundtable  
*The Employment Dimension of the Transition to a Green Economy***

**Washington, DC  
February 3 and 4, 2011**

**Discussion Summary**

**Overview**

The first ever U.S.-Canada-European Commission Trilateral Roundtable, on *The Employment Dimension of the Transition to a Green Economy*, took place at the United States Department of Labor (DOL) in Washington, DC, on February 3 and 4, 2011. The working meeting brought together U.S., Canadian, and European experts representing government, trade unions, industry, and other non-governmental organizations to share information about experiences, challenges, and best practices for preparing workers for green jobs. The discussions addressed the employment and skills aspects of the transition to a green economy, the social dimension of the transition, and the prospects for sustaining the efforts. The box below lists some of the major themes and potential next steps that were discussed.

**Common themes:**

- Accurate labor market information and vigilant planning is necessary to minimize bottlenecks that prevent industry from hiring needed skilled workers;
- Partnerships between national and local stakeholders can help jumpstart the green economy by identifying employment opportunities, implementing training policies, and promoting sustainable green economy investments;
- While it may be difficult to project the number of new green jobs, green training will be necessary for an increasing number of jobs that will have a green component;
- The promotion of green career pathway opportunities can help maximize labor force potential; and
- Due diligence must be paid to worker health and safety in emerging green sectors.

**Potential next steps:**

- The parties should continue to define and measure the number of green jobs and otherwise measure the green content of jobs, and continue to exchange information on progress related to defining and measuring green jobs in their jurisdictions;
- Government officials from the three parties should identify three or four best practices in each jurisdiction related to green jobs that might be considered for replication in other countries; and
- Participants should continue to share evaluations, new ideas, and program information via email exchanges, videoconferencing, and other available technologies.

The following summarizes each of the panel discussions more in-depth:

**Setting the Context Panel**

*Moderator: Ms. Sandra Polaski*, DOL's Deputy Undersecretary for International Affairs, discussed the connection between technological innovation, development, and environmental responsibility. She stated that the transition to a green economy will take careful planning, rigorous research, and learning-by-doing. She urged participants to continue to share their expertise after the Roundtable building on what is learned.

**Mr. Stefano Scarpetta**, Deputy Director of the Directorate for Employment, Labor and Social Affairs, at the Organization for Economic Cooperation and Development (OECD), discussed the urgency of engaging in a transition to green growth, the key drivers of such transition and the role that labor market

and training policy can play to promote it. He stressed that the current sources of economic growth are placing unsustainable pressures on the natural resource base, posing and increasing economic and social burdens on societies. Moreover, the cost of inaction is rapidly growing. The global economic crisis provides an opportunity to foster the transition to green growth and indeed he indicated that a number of countries have promoted green investment as part of their economic stimulus packages. He said the transition to green growth will be an important driver of structural labor market changes, though policy responses are complicated by uncertainty. While green investment can create many new job opportunities in the short-run, over the longer run the net impact on employment is likely to be small. However, many jobs would have to be reallocated from declining brown activities to emerging green activities. The overall employment impact could be larger if carbon tax revenues are used to reduce the existing large taxes on labor, therefore encouraging greater labor supply. However, the impact on employment could be negative if structural unemployment rises because of labor market mismatches. On the skills front, mismatches could occur between the skills of workers displaced from brown jobs and the skills needed for green jobs. It is therefore important to adapt education systems and training programmes to the emerging skills needed in the transition to green growth, but also to provide adequate support to workers affected by the transition.

**Mr. Raymond Torres**, Director of International Institute for Labor Studies at the International Labor Organization (ILO), discussed the three forces at work in the transition to a green economy: 1) the increase in energy costs from fossil fuel, 2) new technology, and 3) policy driven changes. He said that policies addressing the transition to a green economy, such as research on new technologies, developing public transportation, and supporting the renewable energy sector can lead to direct job creation effects. On the other hand, job losses will occur in carbon-intensive sectors and these need to be addressed so as to facilitate transitions to expanding sectors. To facilitate such structural change, he underscored the importance of an integrated education-industry strategy. Finally, he pointed to the need for policy consistency within countries - to help enterprises and workers adjust in terms of skill policies and investment-- and at international level to reduce the risk of environmental dumping and associated job losses. In this regard, he noted the potential impact on decent work of a well-designed budget-neutral tax on carbon.

### **Panel 1: A Framework for Analyzing Green Jobs: Definition and Measurement**

*Moderator:* **Mr. Frank Vermaeten**, Senior Assistant Deputy Minister, Skills and Employment Branch at Human Resources and Skills Development Canada (HRSDC), noted that while HRSDC does not have an extensive green jobs program, they are beginning to engage with other actors because they want to learn what is needed to meet the needs of the green economy. He also emphasized that it is important to not underestimate or overestimate the need for green jobs.

**Ms. Dixie Sommers**, Assistant Commissioner of Occupational Statistics and Employment Projections within DOL's Bureau of Labor Statistics (BLS), stated that the goal of BLS's initiative to define green jobs is to determine 1) how many green jobs there are and how this changes over time, 2) where these jobs are found by industry, occupation and geography, and 3) what these jobs pay. BLS needs a definition that is objective, measurable, and harmonized with standard classification systems. BLS harmonized their green jobs data with standard North American Industry Classification System (NAICS) and the Standard Occupational Classification (SOC) classifications. She stressed that BLS is a statistical agency, not a policy agency, and that BLS does not attempt to identify "good jobs." Wage data and other such data, are however, available. The BLS definition says that green jobs are either (A) jobs in businesses that produce goods or provide services that benefit the environment or conserve natural resources; or (B) jobs in which workers' duties involve making their establishment's production processes more environmentally friendly or less resource-intensive. Although they consulted with other U.S. federal agencies, they did not attempt to achieve a consensus U.S. government definition, as this would be beyond BLS' mission.

**Mr. Tom Bevers**, Advisor for the Belgian Federal Public Service Employment, Labour and Social Dialogue and Chair of the Indicators Group and the Working Group on Employment and Climate Change of the European Employment Committee, discussed the EU's broad policy based approach to defining

green jobs in order to develop appropriate employment policy strategies to cope with environmental issues. He introduced the indicators that will be used to map and follow developments and policies in this respect, based on a system that would allow for measurement across their member states by examining existing data. For an operational measurement of “green jobs,” Eurostat’s EGSS classification will be used.

**Mr. Grant Trump**, President of ECO Canada, discussed their development of a definition for the green economy with supporting definitional criteria from technical, economic, and development process perspectives. ECO Canada defines the green economy as “the aggregate of all activity operating with the primary intention of reducing conventional levels of resource consumption, harmful emissions, and minimizing all forms of environmental impact. It includes the inputs, activities, outputs, and outcomes as they relate to the production of green products and services.” Building upon approaches documented by other organizations, ECO Canada defines a green job as “one that works directly with information, technologies, or materials that minimize environmental impact, and also requires specialized skills, knowledge, training, or experience related to these areas. He emphasized the importance of uniformity in the definitions for ease of comparison. He also introduced the notion of measuring an organization’s involvement in the green economy and the development of a definitional framework to categorize occupations that contribute to the green economy.

**Discussion:** Several discussants pointed out the importance of how one frames the issue of green jobs. For example, one discussant said that the focus should be on making the entire economy greener as opposed to increasing green jobs. Another discussant cautioned about overproducing workers with green skills because demand has not increased dramatically and many workers will still be part of the traditional economy. Another felt that the issue should be less about counting jobs and more about the broader benefits of green investment so that the green jobs debate is not framed as “we spent X million and only created Y jobs.” Some participants noted, however, the need of some governments for definitional anchors in order to measure results and justify their policies.

#### **Demonstration of Best Practices by Arch Training Center (United States)**

Instructors and students from the Arch Training Center, a jobs training center originally founded in 1984 for energy conservation, showcased “solar suitcases” built by YouthBuild students. The solar suitcases generate and store power that can charge cell phones and power small electronics. The YouthBuild program is for 16-24 year old underprivileged youth and provides real life training experience at an interactive training center. Students build solar suitcases, install solar panels, and weatherize homes in Washington, D.C. YouthBuild’s solar suitcases were used for relief efforts in Haiti following the earthquake. Through student innovation the solar suitcases, are now built half the size for half the cost but still yield the same power.

#### **Luncheon Discussion with U.S. Secretary of Labor, Hilda L. Solis**

Secretary Solis greeted the participants and expressed her appreciation to them for addressing these questions in a truly international manner. Noting that green jobs is a priority issue for the Department of Labor, she recalled how environmental hazards in her own community had influenced her to focus her attention on green issues. She stressed the importance of green jobs being good jobs for all workers. President Obama, she said, was committed to the United States becoming the world’s leader on renewable energy. The administration is also committed to working with global partners, and she underscored the importance of working with businesses, since they create jobs. She highlighted the positive impact of the Recovery Act in creating U.S. green job opportunities and noted new DOL initiatives: the various programs to identify the skills needs for a green economy, the publication of a new career guide entitled, *Why Green is Your Color: A Woman’s Guide to a Sustainable Career*, and ongoing work on defining and measuring green jobs. Secretary Solis reiterated the need to continue to work together and share best practices in a way that would at once address serious environmental problems while also creating good, sustainable jobs.

## **Panel 2: Effective Partnership Models for Green Jobs Training**

*Moderator:* **Ms. Kristin Schreiber**, Head of Unit for External Relations, Neighborhood Policy, Enlargement and IPA, Directorate General for Employment, Social Affairs and Inclusion at the European Commission, discussed the current shift in the demand for skills, the future increase in the demand for high skilled workers and the importance of considering how we meet the needs of industry.

**Mr. Robert Strauss**, Head of Unit for the Employment Analysis, Directorate General for Employment, Social Affairs and Inclusion, at the European Commission, pointed out that the net impact on the number of jobs will actually be limited but that there will be a larger impact on job reallocation which will impact skills, job content, and perhaps working conditions. He stated that effective partnership models to respond to these challenges may take the form of “green collar partnerships,” especially with SMEs that could advance workplace and industry skills, knowledge, and innovation. He noted that policies should consider how to maintain close links between conventional and new industries and not force artificial separation between green and brown jobs; rather create new green jobs while greening others.

**Ms. Van Ton-Quinlivan**, Director of Workforce Development for Pacific Gas and Electric Company (PG&E) in the United States, pointed to students’ lower interest in math and science and the coming exodus of baby boomers as key factors contributing to a deficit of skilled workers and trainers. In response, PG&E has partnered with educational institutions, government, and other businesses to fill the training gaps. PG&E’s PowerPathways Program seeks to address the skills shortage by developing stackable credential programs that build from workplace readiness skills to job specific skills and works with a consortium of employers to hire new graduates. She suggested greater use of incentive programs, such as loan forgiveness for STEM programs to get students interested in math and science, and other programs to get baby boomers out of retirement and into teaching positions.

**Dr. John D. Wiebe**, President and CEO of the GLOBE Foundation in Canada, presented GLOBE’s recent study on British Columbia’s green economy and the labor market. The study found that demand for qualified and experienced green workers remains high but that attrition through retirement is reducing the supply of qualified workers. In particular, there is a need to: 1) support education/training and increased funding for applied research/innovation, R&D, and commercialization; 2) increase collaboration between educational institutions and private sector, such as through co-operative education, internship, and apprenticeship programs; and 3) align national, regional, municipal, and industry initiatives and develop partnerships to overcome barriers. He also raised the idea that students may consider apprenticeships or internships, as many educational institutions do not have the courses or training capacity for the emerging green qualifications.

**Discussion:** Discussants noted the benefit of focusing on soft skills or job readiness skills, and building on existing skill sets; these also help women and other disadvantaged minority groups move into high quality green jobs. Some discussants questioned how to get women more involved in green jobs because women self select out of math and science due to societal pressures. Discussants also noted the need for some strong signaling from the employer community that jobs are opening because otherwise students will not enter these training programs. One discussant noted interest in the concept of employer consortiums mentioned by PG&E to help boost the demand for graduates. Some discussants stressed the importance of signaling where the jobs are, so educators and trainers can meet the needs.

## **Demonstration of Best Practices by European Foundation for the Improvement of Living and Working Conditions**

**Ms. Christine Aumayr**, Research Officer at the European Foundation for the Improvement of Living and Working Conditions, discussed the “three-phase model of social learning” -- the latent phase, the regulation phase, and the consolidation phase -- and applied it to the issue of green jobs, noting that many European countries are in different phases of the social learning model. The demonstration provided case studies on France’s OPCA, a joint approved training fund collection agency for the construction sector, Romania’s Euroneff training of the construction sector workforce in the field of energy efficiency techniques, and the European Energy Manager (EUREM) program.

### **Panel 3: Green Skills and Training**

*Moderator: Ms. Gerri Fiala*, DOL's Deputy Assistant Secretary of Employment and Training, highlighted the Department's recognition that a more focused effort on credentialing can help lay the human capital foundation necessary to support new and growing sectors of the economy. She noted that in the past, DOL did not always require that training programs lead to industry valued credentials, but this is now a priority.

**Dr. Sarah White**, Senior Associate at the Center on Wisconsin Strategy (COWS) in the United States, discussed her organization's greener skills agenda that calls for the establishment of a national qualifications framework, the creation of career pathways, the use of sector strategies to forge green or greener industry partnerships, and a focus on associate and journey level training. She noted the lack of a coherent framework to deliver skills in the United States due to a fragmented system of college, university, apprenticeship, and community-based programs and the lack of a mechanism to measure skills with credentials that document competencies rather than credits, which particularly impacts lower skilled workers. She also drew attention to several positive Department of Labor efforts including: 1) investments in green jobs grants that fund state energy sector partnerships; 2) dissemination of administrative guidance on increasing credential attainment in Labor-funded employment and training programs that steers states toward better alignment of credentials; and 3) building on a national competency model for energy efficiency by engaging in the recovery through retrofit initiative.

**Ms. Linda Franklin**, President and CEO of Colleges Ontario in Canada, pointed out that both federal and provincial programs that support green investment, such as Canada's Economic Action Plan, and Ontario's Green Energy Grant, are also spurring the need for green jobs training. Colleges have responded with 35 new diploma or certificate programs in the last three years. Industry advisory panels drive curriculum, ensuring that training is relevant to the needs of the labour market. During the recession, a program called Second Career was also launched to offer skills and training to individuals who were unemployed. The program helped almost 36,000 laid-off workers. The program served an equal proportion of men and women with an average age of 40 and was successful with a 93 percent graduation rate and 60 percent of students finding a job within three months of graduation.

**Mr. Matthias Thorns**, Deputy Director, Department of European and International Affairs of the Confederation of German Employers (BDA), reiterated that most of the skills for the transition to a green economy are not new and that the skills attained by workers in declining occupations are valuable and transferable as they transition to new occupations. He also highlighted issues related to shortages in STEM skills in the EU. The German business federations -- BDA and the Federation of German Industries -- founded an initiative in 2008 called "MINT create future!" ("MINT" is the German equivalent of "STEM") with the aim of increasing the public awareness of the importance of STEM skills. Around 3,500 STEM ambassadors have contributed to the success of the initiative, which so far has led to establishing networking linkages between more than 31,000 companies and over 33,000 schools and universities, reached more than three million students, and gathered over €100 million in support for qualitative improvement of STEM education in schools and universities.

**Discussion:** A few discussants said the fragmented approach of the national and state education systems in the United States and Canada hindered transferability of credentials and training. Another discussant noted the difficulty of a worker moving from apprentice to electrical engineer without a mechanism for equating skills to credentials or diplomas. Another discussant offered one of the U.S. federal solutions - mySkills myFuture, an online tool for dislocated workers to determine how existing skills transfer from one occupation to another, including what type of training is required.

One discussant said students tend to be steered towards post-secondary education in advanced STEM skills, such as engineering, though that may not be the best fit for all individuals.. The system creates a skills gap for jobs not requiring advanced STEM skills, and we need to determine how to offer appropriate training/education and access to this training to prepare all workers. Greater outreach to students as they formulate their career paths to inform them of all their options is important, such as pursuing alternative higher education opportunities, through apprenticeship programs and associate and technical degrees

Another discussant seconded this notion, pointing out that innovation does not always come from scientists, mentioning the example of the Arch Training Center solar suitcase project where the cost and the size of the solar panel system was shrunk into a suitcase to deliver the same results to the Haiti relief efforts.

#### **Panel 4: Green Jobs for Everyone**

*Moderator. Dr. William Spriggs*, DOL Assistant Secretary for Policy, summarized the Secretary's commitment to ensuring that green career pathways are available to all workers, citing examples of policies addressing the needs of underrepresented workers. Emerging green jobs are an opportunity to avoid usual labor market barriers. While evaluations of DOL green jobs programs are not yet complete, preliminary data suggests positive results.

**Mr. Chris Henderson**, President of Lumos Energy and Chairman of Delphi Group in Canada, opened by noting that a country's prospect for sustainable prosperity is shaped by geography, sharpened by history, guided by governance, and will be harnessed only through the commonwealth of human ingenuity and hard, honest work. He emphasized that the mother of all green job opportunities in Canada is in clean energy and primarily in hydro power. He said that underrepresented workers in Canada, such as Aboriginal peoples, recent immigrants, youth, and downsized industrial workers, are good candidates for clean energy jobs and emphasized the importance of location and culture in including these groups in the green economy. Lumos Energy is partnering with local Aboriginal communities that have become investment partners as well as the workforce for many of their new renewable energy projects.

**Ms. Sara Manzano-Díaz**, DOL's Director of the Women's Bureau (WB), offered her translation of the notion of a green economy as good green jobs for women. She highlighted the WB's soon-to-be launched career guide for women, *Why Green is Your Color, A Women's Guide to a Sustainable Career*, that discusses training opportunities, how to find a green job, green entrepreneurship, and provides options for young women deciding on a future career path. She noted that some of the current challenges to integrating more women into the green economy are similar to challenges women face generally, such as lack of skills and resources to get training, child care issues, and lack of transportation, but also said that the green economy introduces some new challenges such as lack of confidence by women to enter areas that are perceived as male-dominated. To move more women into the green economy, she suggested marketing to women, responding to their resource barriers, and she emphasized the importance of career counselors, mentors, and female instructors who can serve as role models.

**Mr. Egbert Holthuis**, the Head of Unit (acting) for Social Protection and Social Inclusion Strategy, Directorate General for Employment, Social Affairs and Inclusion, in the European Commission, discussed combating poverty in the green economy. He said that job destruction exists in extracting and energy-intensive job sectors, and that low-skilled workers are at risk as those operations are downsized. Further, there is a strong regional dimension of job openings and job destruction, but poor workers may not have the means to relocate. To prevent further exacerbating the impact on the poor, he emphasized supporting the job growth potential of SMEs, fostering self-employment, and modernizing social protection to protect against ups and downs in income due to self employment.

**Discussion:** Many discussants touched on the issue of mobility, both the inability of disadvantaged workers to move to new regions where jobs are available and local mobility issues such as lack of transportation from suburbs to cities and even within cities. One discussant noted that some solutions, such as telework, are only applicable for high skilled workers. The discussion yielded several suggestions for greater integration of disadvantaged workers into the green economy, including peer to peer education, working with local non-profits to steer more girls into STEM, and tapping into the excitement of youth about environmental issues to lead them to green careers. One participant questioned whether green jobs are different than other jobs when it comes to policies addressing underrepresented workers such as women; to which the importance of making sure key segments of the workforce are not left behind in the transition to a green economy.

## **Demonstration of Best Practices by Canadian Housing & Renewal Association**

**Mr. Bruce Pearce**, President of Canadian Housing & Renewal Association (CHRA), presented CHRA's new 'Green Housing, Green Jobs' policy, and two community-based green jobs enterprises which embody it. The first, Choices for Youth, was established in 1991 and is a community-based organization serving the housing, employment and education needs of homeless and at risk youth ages 16-24 in St. John's, Newfoundland and Labrador. Choices for Youth recently opened the Lilly Building, an affordable housing facility for male and female youth, which provides 14 longer-term residential units with an educational and employment component on site. Train for Trades was created by Choices to engage youth in extensive renovations of the Lilly Building through skilled job training, and the building itself is now energy efficient. Train for Trades has now evolved to complete energy retrofits of Newfoundland & Labrador's social housing.

The second project is *Warm Up Winnipeg*, which provides energy and water retrofits in 16 of Winnipeg's lowest income neighborhoods and provides valuable training opportunities for residents. *Warm Up Winnipeg* trainees are aboriginal and typically in their early teens to late 30s who face multiple barriers to employment such as previous incarceration.

### **Panel 5: Making Green Jobs Quality Jobs**

*Moderator. Mr. Georg Fischer*, Director for Analysis, Evaluation and External Relations, Directorate General for Employment, Social Affairs and Inclusion, European Commission began the panel by noting that green jobs require some level of autonomy by workers, as exemplified by the demonstration of the solar suitcases by the Arch Training Center students.

**Mr. Ken Bondy**, the National Coordinator of CAW-TCA Canada, sees good green jobs as jobs that must support a sustainable environment and a sustainable economy. These jobs contribute to conservation by making lower demands on natural resources, using energy from renewable sources and reducing to the lowest amount possible or completely eliminating exposure or discharge of hazardous chemicals to workers and the environment. The CAW challenges the idea that any green job is a good job. A green job producing wind turbine blades or solar panels in a non-union plant staffed with agency workers exposed to hazardous chemicals is a very different job than a plant where workers have a good collective agreement and union health and safety representation. In 1995, CAW pushed legislative reform that allowed production of industrial hemp in previous tobacco regions, in order to maintain those jobs in the agricultural sector while producing an environmentally friendly product. CAW continues to campaign for End of Life Vehicle Recovery legislation to recycle toxic components of vehicles that would end up in landfills, thereby creating more jobs. CAW is also calling for the Federal government to establish a National Green Economy Consultation Committee that would include government, industry, education and labor representatives to develop a broad based strategy to sustain a green economy taking into account employment impacts and employment adjustment.

**Ms. Anne Panneels**, Advisor for the European Trade Union Confederation, noted that many jobs that are green in principle are not green in practice such as energy efficient light bulbs produced with mercury, or wind turbine blades sprayed with chemicals. Evidence, she said, also shows that green jobs do not necessarily constitute decent work. For example, employment in recycling is identified by a UNEP-ILO report as often precarious, involving safety and health hazards and generating wages and incomes below the cost of living; labor and human rights violations have been recorded in the case of biofuels; chemical products used on wind turbine blades can be dangerous for workers' health; working conditions in the construction sector are often of poor quality and with low pay. She stated that the pillars to a just transition to a green economy include: 1) dialogue between governments and key players including the social partners; 2) development of green and decent jobs through investments in low carbon and resource efficient technologies, research and development and innovation; 3) the development of green skills through government-led, active education/training and skills strategies; 4) democratic decision-making and respect for human and labor rights; and 5) strong and efficient social protection systems.

**Dr. David Michaels**, DOL's Assistant Secretary of Occupational Safety and Health, addressed the unintended consequences of green jobs and emphasized that the "green glow" cannot and should not hide what is really going on in some emerging sectors. He noted that green jobs may be "new" jobs, but they have "old" hazards, such as falling and fire hazards on wind turbines. He suggested addressing these issues through stakeholder participation, increasing worker awareness of the hazards, mitigating hazards by prevention through design, and engaging the scientific and engineering community to build safety into new jobs. He emphasized the importance of considering the human side of the environmental movement and cited the recent egg recall in the United States as an example of putting the environment above workers. The poultry industry was cited by OSHA several times before the egg recall for workplace safety and health violations but there was no real reaction from the public at large until people got sick from eating contaminated eggs.

**Discussion:** Some discussants noted that some U.S. workers, particularly immigrants and single mothers, are hesitant to report occupational health and safety hazards, because they fear reprisal. One discussant noted that there may be different languages spoken in any given U.S. workplace, some of which are not within the competency of OSHA, which makes it very difficult to gain the trust of workers to report conditions in the factory. Another discussant observed in Canada can be used to hold CEOs accountable for workplace safety and health violations. Many discussants added that the lack of union density and the undermining of unions globally contributes to low paid, low quality, and unsafe jobs. They stressed the importance of partnerships between unions and corporations because workers are the human resources that manufacture products, and there should be a voice for them in the workplace.

#### **Luncheon Discussion: Developing Countries and Green Jobs (ILO)**

**Ms. Ana Belen Sanchez**, Climate Change Specialist in the ILO's Job Creation and Enterprise Development Department, presented the ILO's approach to helping countries achieve their decent work goals through the Green Jobs Program. She noted that much of the world's working poor lack access to energy and adequate housing, and face many other challenges. She also stated that many of the world's large environmental disasters start as industrial accidents. The ILO conducts training for both workers and employers to make all jobs greener and has developed diagnostic tools to help developing countries identify how many green jobs can be created in their countries. She described the linkages between development and green job opportunities, such as building roads and schools cleanly and building water infrastructure. She elaborated specific examples of the ILO's work with developing countries and emerging economies in partnership with other key stakeholders.

#### **Panel 6: Sustainability of Government Investments**

*Moderator.* **Mr. Alexis Conrad**, Director General, Skills and Employment Branch, HRSDC, opened the session emphasizing the value of strategic government investments in supporting the development of the green economy.

**Mr. David Foster**, Executive Director of the BlueGreen Alliance in the United States, said that the goal of the BlueGreen Alliance is to turn every job into a green job and every green job into a union job. He emphasized the importance of government investment in clean energy to attract private investment. The American Recovery and Reinvestment Act of 2009 (ARRA) contributed to the growth of the green economy itself but also leveraged private investment far beyond Federal spending. He noted that foreign governments, particularly China, are outpacing the United States in supporting green investment and policy development, drawing American clean energy companies and venture capitalists' attention abroad. One lesson from the ARRA, he noted, was that lack of clarity about tax breaks and incentive programs hamper future investments; it scares off would-be-investors and sustainable investment is needed.

**Ms. Kaili Sermat-Harding**, Director of the Strategic Policy and Research Branch at the Ministry of Energy, Government of Ontario, Canada, discussed the three key components of Ontario's Green Energy and Green Economy Act, 2009: 1) support for growth in renewable energy generation; 2) support for grid modernization; and 3) support for conservation. One particularly important aspect of the Act is the Feed-In Tariff launched October 1, 2009. The Feed-In Tariff offers stable prices under long-term contracts for

energy from renewable sources that use a certain percentage of locally sourced goods and labor. She noted that the planned investments in clean energy projects, private investment in solar and wind component manufacturing in Ontario, and the overwhelmingly positive response to the Feed-in Tariff program indicate that Ontario is well on the way to meeting the projection of 50,000 direct and indirect jobs.

**Mr. Patrick O’Riordan**, Policy Coordinator for Sustainable Industrial Policy in the Directorate General for Enterprise and Industry, European Commission, discussed the business impact of carbon reduction targets that all member economies collectively have to meet. He emphasized the importance of setting targets and requirements that don’t drive out existing industries that are proven viable especially while we are unsure about what will take hold and be sustainable. He noted that markets themselves will not deliver all the needed solutions and there is a need for clear policy signals supported by both government and social partners to incentivize eco-innovation. In addition, he described the Europe 2020 initiatives for smart, sustainable, and inclusive growth, including the flagship initiative on industrial policy, which supports efforts aimed at greater resource and energy efficiency.

**Discussion:** Some discussants encouraged carbon pricing. A few discussants suggested reforming public procurement rules to respect national and international labor and environmental standards. Another discussant retorted that while public procurement is one method for government investment into the green economy, it is important not to over regulate what governments have to purchase. One discussant noted that encouraging business investment in the green economy can best be achieved through the government underwriting some of the risk. Another discussant agreed, noting that businesses need concrete policy information in order to make decisions. One discussant suggested the need for government policy to drive manufacturing to SMEs, as these businesses have the greatest potential for job creation. Another noted that the EU has SME ambassadors and one-stop shops for SMEs to give them access to helpful resources.

#### **Demonstration of Best Practices by the Occupational Safety and Health Administration (United States)**

**Mr. Sanji Kanth**, Safety Engineer in DOL’s Occupational Safety and Health Administration, presented the new OSHA website on green jobs. He showcased a number of “old” and “new” hazards in new and emerging green industries. For example, he presented hazards workers may be exposed in the eight emerging green industries, including: wind energy, solar, geo-thermal energy, biofuels, recycling, green roofs, hydrogen fuel cells, and weather insulating/sealing.

#### **Panel 7: Closing Remarks and Next Steps**

*Moderator:* **Dr. William Spriggs**, DOL Assistant Secretary for Policy, asked all participants to think about how they can move forward together and resolve stickier points while utilizing available online methods of communication and tools.

**Ms. Jane Oates**, DOL Assistant Secretary for Employment and Training, thanked the delegations for their participation at the roundtable and gave a special thanks to the colleagues at the European Commission and Canada for their generosity in hosting participants for two wonderful dinners. She noted that the discussions over the past two days indicated a joint desire to address underserved populations and to make green jobs training more accessible across sectors. She said that the DOL will follow-up with Canada and the European Commission to ensure that all three delegations are building on the Roundtable in a productive way.

**Mr. Frank Vermaeten**, Senior Assistant Deputy Minister, of the Skills and Employment Branch, at HRSDC, congratulated the delegations for bringing a wealth of knowledge and willingness to work together. He recapitulated the current challenges to measuring and defining green jobs, achieving a good match of supply and demand, and considering the special role culture and place have in the green economy. He also encouraged follow-up activities from the roundtable including ongoing exchange on definitional issues and sharing best practices related to Green Jobs.

**Mr. Georg Fischer**, Director for Analysis, of Evaluation and External Relations, Directorate General for Employment, Social Affairs and Inclusion at the European Commission, noted that the green economy as discussed throughout the conference was much broader than many had suspected. He was happy to see that the United States and Canada are very serious about the transition to the green economy and emphasized the need for a proactive approach to labor market policies.