

## **Resolution: The Need for Stable, Quality Jobs - Key to a Stronger Middle Class (prioritized at 2018 Halifax Convention - moved by Senior Liberals' Commission)**

**WHEREAS:** Senior Registered Liberals across Canada identified the need for “stronger government efforts to create stable, quality jobs for all Canadians with an emphasis on creating real opportunities for the younger generations” as a priority issue ; Statistics Canada estimates 7% of its mid-skilled jobs during the past 10 years, resulting in a decline in median incomes during the past decade; many middle-aged workers displaced by these losses have been forced to take lower level part-time jobs with limited benefits. Similarly, many younger, well-educated Canadians are also forced to take lower level part-time jobs that do not support progress toward a middle class life-style. While Canada has supported innovation through education, R&D, and tax incentives, there is limited evidence that such innovations translate into a sufficient number of quality jobs for Canadians. Other countries such as China, Germany and South Korea provide models of cooperation among government, industry and academia leading to globally competitive corporations and associated jobs in new economic sectors;

**BE IT RESOLVED** the Liberal Party of Canada urge the federal government to:

- provide leadership in partnership with Canadian businesses, unions and educational institutions for identifying new business sectors in which Canadian corporations can create the necessary advantages to compete internationally thereby, supporting stable, quality jobs for all Canadians.
- develop the necessary programs to ensure Canadian innovations translate into stable, quality jobs by encouraging and supporting Canadian corporations to grow and compete in the global marketplace.

(Senior Liberals' Commission)

### **The Issue**

While unemployment is currently fairly low in Canada, many Canadians are struggling with a lack of wage growth, a lack of job stability, and a path to the middle class. There are multiple reasons for this hollowing out of the middle class, not the least of which has been the shift to a knowledge-based economy which leaves many Canadians who are not academically-oriented in a tough spot. Additionally, part of the problem is that some young Canadians are stuck without a path to quality employment that meaningfully matches with non-academic choices.

### **The Future**

- We know that Canada must transition away from a carbon-based economy, as far as is practicable.
- We know that AI, as a continuation of automation, is and will be, displacing employment.
- We know that our population demographics are changing rapidly to a more aged mix. That stresses our health care and associated services.
- We know that large land intensive projects (e.g. pipelines, hydroelectric dams) are a fading option for the future, for a variety of reasons. That creates a shift away from “traditional” approaches of “more of the same” for mid-skill workers.
- We know that politically and ethically, environmental and social sustainability are key elements to the success of efforts to move our economy.

### **The Opportunities**

There will be a significant demand for non-carbon based energy sources, and associated downstream technology. Conversely, there will be destruction of previous employment in that directional shift – but if managed correctly, the net can be more quality employment IF we work with Canada's strengths.

There will be downstream benefits from AI/Automation that can “soften the blow”. Perhaps not enough to net gain quality jobs, but if Canada is not an active participant, the likelihood is that we will get the downside and none of the upside.

We can anticipate opportunities in our shifting demographics, and in doing so, provide opportunities for quality jobs, especially as our overall care systems (health, elder, disabled, etc.) shift to provide better results from limited available funding. Example: Team care is a key component of systems that provides equivalent or better health care at lower per patient cost. That creates opportunities for home care workers, home care nurses, nurse practitioners etc.

Canada has some strengths that are languishing that can be applied to the large project issue. We tend to greenfield far too much. If, for example, we need to shut down a coal fired power plant and replace it with other technology, the tendency is that other technology is built elsewhere – hollowing out the community that was supported by the coal plant and destroying middle class wealth base in the process (housing prices fall, retail shops close etc.). Wherever practicable, we should avoid this and the resulting maintenance of middle class wealth base will pay dividends.

Canada has untapped expertise and potential in some key areas. We have tended to shy away from some of these for political expediency.

## **The Practical Options**

### ***Nuclear Energy***

Nuclear energy has gotten a bad rap. Safe nuclear energy is entirely possible.

Canada has a somewhat dormant nuclear industry, and carbon based expertise (pipe fitters through to machinists, fabricators, welders, builders, pump manufacturers etc.) that can shift readily. Canada is an exporter of uranium. We know the European Union (EU) countries that have been most successful in achieving low carbon footprints/capita while maintaining prosperity rely heavily on safe nuclear energy. Finland and France are just two examples. The United Kingdom (UK), in their overall energy strategy, estimates that at least 30% of their overall energy needs will have to come from nuclear energy if they are to meet Paris Accord targets.

In the Canadian context, we know that we will need more steady supply electricity in the future to displace fossil fuel use in home heating and transportation. The options for more hydroelectric power are very poor. Intermittent sources are simply too expensive on a ‘delivered to customer basis’, and the potential for Canadians mid-skill jobs is poor, as we cannot compete with China and other “powerhouse” countries in that arena. Safe nuclear energy provides an option for Canada that can produce a lot of jobs, affordable steady supply electricity with the added benefit of the possibility of displacing coal etc. without disruptive community job losses.

The government of Canada has the option of promoting this direction using subsidies for R&D to make Canada a leader in safe nuclear energy...subsidies for locating said nuclear power production in communities with displaced fossil fuel plants, and... subsidies to retrain those workers – which in the long run would net out compared to the wealth losses and costs of dealing with the unemployed workers. Safe nuclear includes Thorium reactors, which AECL formerly did a fair bit of work on before it was broken up.

A potential “hidden” benefit is that in following such a path, resistance to the transition to non-fossil fuel based economic activity would be reduced. The political problem is selling the concept that nuclear energy is safe.

### ***Enhanced Geothermal Energy***

EGS is not yet “ready for prime time”. R&D is underway in some countries. Investments in EGS R&D are, point blank, risky. The problem of induced seismicity may be intractable. However, if it can be made to work, even in limited geologies, Canada has huge potential in geologically stable areas to replace fossil fuel use with EGS geothermal energy. The beauty of EGS in the Canadian context is that it would most likely be best suited to our oil producing regions, and uses directly transferable technology from crude oil exploration and production. Example: a drill rig for fracking oil and gas resources is suitable for EGS development.

Canada could directly involve itself in EGS R&D as potential future option, as IF it works out in our context, it provides a direct job replacement for displaced oilfield workers. A high risk but potentially high reward option.

### ***Investing in CO2 to Synthetic Fuels***

CO2 from the air to synthetic fuel technology is ‘high risk, potentially very high reward’ in Canadian context. R&D for this high risk potentially game changing technology should be a Canadian priority in the context of our geographically large low population density country.

Electric vehicles (EVs) don't work very well in many communities, but can work well in urban settings. That leaves a large portion of the country unable to function well in the context of EVs, and requiring fuels like gasoline.

The economics of capital intensive projects such as hydroelectric projects and nuclear plants (and in reality almost all electrical generation) are being negatively affected by plunging off peak wholesale electricity prices. This is a North American grid problem. It is, for example, costing Ontario a lot of money. If CO2-Synfuel technology can be made to function economically, then it is a natural for Canada. It has the potential to provide a stable off peak electricity market and carbon neutral gasoline substitute for those communities when EVs are impractical. It would also obviate the huge costs of the necessity for massive amounts of grid storage that inevitably drives up electricity prices.

Canada should support CO2-synfuel in our context, R&D, subsidies for pilot plant and trial plant(s) if the R&D is successful. The payback, although from a high risk investment, would be huge. Not only providing quality jobs in the production stage ( such as replacement jobs for fossil fuel workers) but providing many stable quality jobs in being a leading equipment provider.

### ***AI/Automation R&D***

Continued and enhanced support for AI/Automation R&D and education for workers in those fields will be a key for softening the blow of AI/Automation that will grow and continue into the future.

### ***Aging Demographics***

Point blank, Canada cannot continue to pour more and more into health care, elder care etc. We will have to adjust our care models to match more cost effective approaches. Team care, especially in context with home care, is a key cost efficient approach to help with this. The vast majority of “boomers” have made it clear that they want to stay in their homes as long as possible. Team care combined with home care provides that, and cost effectively. The homes of elders provide the “beds”; not expensive hospitals and care institutions. That lowers the capital cost, and as much of the work can be done by a mid-skill team, labor costs are lower. That will require many home care workers, home care nurses, nurse practitioners, care coordinators, and others. Canada should then be providing additional supports for the training of large numbers of this mid-skill workforce.

It should be noted that Team/Home care relieves a lot of pressure on existing resources, which provides many other benefits. A recent estimate indicates that in BC, the potential for fully implemented Team/Home care would relieve the pressure on hospitals by up to the equivalent of 11 new average size fully staffed hospitals. This one is a win-win-win. Optimized costs, better care, happier citizens, and more mid skill jobs bringing more Canadians back into the middle class.

### ***Fisheries***

It is becoming abundantly clear that Canada's fisheries resources cannot sustainably support future fish consumption. The only realistic option is going to be fish farms. However, ocean/lake based fish farms are simply not going to be socially acceptable.

Canada should then, possibly in conjunction with First Nations partners, invest in land-based fish farms. This will require more R&D and supports through to the building of land-based fish farms. It may also require the

utilization of species not currently farmed, which would require some marketing support. Such land-based fish farms could be a key support for remote communities and/or communities that are in transition (e.g. from the loss of a pulp mill or mine). It will also require care to ensure that the feed base for the fish farms is not obtained by “strip mining” biomass from the oceans. Waste to fish feed chains need to be established. Such a feed supply chain could look like segregated urban organic waste used to feed insects then used to make feed meal for fish farms provided that suitable fish farm species have been chosen. That potential “waste into market fish” chain would then also supply both low and mid-skill jobs for Canadians.

### ***“Right to Repair” Legislation***

The “right to repair” movement is bubbling up out of the environmental movement. The EU is considering legislation at this time, in part, to meet climate change targets.

A simple example: a washing machine takes roughly 1.1 tonnes of CO<sub>2</sub> to manufacture/deliver to the customer. Many current models are not built to last. Roughly 10% of washing machines in recycling centers are less than 5 years old. Part of the problem is shoddy manufacture, part of the problem design such that repairs are not feasible, and part of the problem is manufacturers not making spare parts available and/or, insisting repairs can only be done at specified manufacturer-controlled central depots.

Another example is the farmer who wants to repair his or her modern tractor which relies on computer boards, and the manufacturer will not make available the code reader. That costs the farmer down time, and wastes fuels transporting it to an “authorized” repair facility.

Another example is manufacturers who stop making parts available very shortly after their product passes its warranty expiry. The writer has a rare model 2004 GMC pickup, and a part that is bound to wear out, the ball joints, are no longer available.

The essential concept of “right to repair” is extending the service life of consumer products, both by forcing repairable design, repairable terms of sale (i.e. not restricting repairs), and parts availability. Given that so many consumer products are made overseas, this can be a win-win-win for Canadians. Consumers get products that will cost a little more up front, but a lot less in the long run. Consumers who are “handy” can repair the products themselves, and for those who are not – local repair jobs are created along with repair parts outlet jobs etc. Those repair and parts jobs are mid-skill jobs – the ones we are so sadly lacking.

Climate change agendas are helped by reducing waste. Overall “right to repair” is good for productivity, adds jobs in Canada, is better for the environment, and better for consumers.

### ***Battery Technology***

Current battery technology in the EV context (and other fairly large storage applications) has a density problem that results in range problems for EVs. It is Li-ion based, which presents two opportunities for Canada.

One of those is the environmental downsides of Li-ion batteries which includes the inability to recycle Li-ion batteries back to Lithium suitable for new Li-ion batteries. That is a looming problem around the world. A solution to that recycling problem will provide jobs in the future. Canada will have a Li-ion battery recycling problem. It would behoove us to get ahead of that problem by funding R&D efforts into Li-ion battery recycling.

The second opportunity is looking at potential battery production of higher energy density alternative material ion batteries. Al-ion batteries would be a natural for Canada with our large Aluminum smelting industry. At this point in time, Al-ion batteries are strictly an R&D exercise, but with our strength in Aluminum and automobile manufacturing, it could make sense for Canada to support Al-ion battery development.

## ***The Secondary Problem***

The traditional approaches of tax breaks and subsidies in moving our economy forward on the employment and wage growth fronts appear to have largely broken down. The correlation between these traditional approaches and real progress in jobs and wages has largely broken down, especially in the key area of mid-skill jobs.

This has decline, in that correlation of traditional government incentive and support programs and results has a correlation with the rise of the influence of multinational and state owned enterprises as “players” in our economy. Increasingly, we see these players operating on agendas that defeat traditional government incentive mechanisms. We have seen recent examples where “agreements” with corporations who purchase Canadian companies renege on at least the spirit of “agreements” and do not fulfill the intent. We have also seen instances of “subsidy mining” where corporations only continue the intent and obligation for as long as the subsidy money keeps flowing in.

Increasingly, we see the “players” in the economy being state-controlled. CNOOC, Petronas and Statoil are just 3 examples. It is difficult to see how such state-owned layers can be counted on to prioritize Canadian interests. Certainly, the perception among many Canadians is that such corporations tend to be exploiters. Of note, however, is how highly successful such state-sponsored corporations are in the modern context.

So how do we respond?

Traditional crown corporations have a tendency toward inertia and in some cases, becoming “money pits”. They most often lack the independence necessary to move forward at an entrepreneurial pace. What we need is a mechanism where there is a clear mandate to work in the ongoing interest of Canadians, yet has entrepreneurial momentum and goals. Perhaps the most promising option is joint-venture corporation: formed by the government to pursue specific entrepreneurial areas for a set time frame (renewable). The government would hold a controlling interest, which (if salable) could be sold at the expiry of the time frame or kept, if the government continues to see value and renews its commitment for a further period.

The government would provide seed capital and an initial core management board, and a commitment for set period tax incentives and other supports as appropriate (again renewable subject to review). The venture terms would include caveats such as “for the purpose of developing “x” in Canada”. The mechanism for inviting in joint venture partners would need to be established. It could be as simple as offering IPO shares, or more limited to partners that have established expertise depending on the venture. Such a mechanism would not necessarily be applicable to fostering those areas, such as team/home care, that are “locked” into Canada. The intent being; to ensure funds given in support of R&D are not used simply to advance interests elsewhere, nor subsidies being “mined”, nor tax incentives resulting in a “race to the bottom”.

It would be a key to such ventures that they have set time frames (not longer than 10 years) for review/renewal. This would impose a deadline (thus adding a sense of urgency) and automatically trigger parliamentary review.

It would also be key in examining the creation of such ventures to note the bifurcation that exists between high skill job efforts and mid-skill job efforts. High skill job efforts do appear to respond much more readily to educational and other traditional stimulants. Such venture efforts should be targeted at advancing jobs that are less susceptible to high educational standards, the mid-skill jobs (welders, machinists, rig workers, technicians, etc.) and especially those with transferable mid-skills from declining or soon to be declining economic activities.

**Good candidates for test formation would be:**

- i) the fisheries example applied to the maritime provinces;**
- ii) CO2 to synthetic fuels in oil producing provinces;**
- iii) battery technology in auto producing provinces.**

**All 3 fit nicely into environmental action and transferable mid-skill job creation. All 3, if successful, would be readily salable to existing industry players, if desired, and would tend to place Canada at the forefront in the fields giving substantial spinoff benefits to other industries.**

The intent being to create a hybrid model that can harness both the advantages of state-owned enterprises, and the entrepreneurial momentum of the private sector (which previously has tended to become somewhat risk averse).

**Oversight of such joint ventures should be by multiparty parliamentary committee, conducting annual oversight review and serving a role on the board of directors to be determined. That method of oversight would hopefully remove some of the political stuff that hampers traditional crown corporations.**

No matter how we go about it, Canada is going to need to be at the forefront of technologies needed to meet Canada's challenges. The only way that we can do that in the modern multinational context, and in competition with state owned enterprises, is to have the government of Canada as a directing stakeholder to ensure that the benefits to Canada are maximized, and the mid-skill jobs stay here.

### ***A Third Problem***

Matching and upgrading skills. Many mid-skill jobs require apprenticeships. Traditionally, the vast majority of apprenticeships were provided by large unionized firms. This leaves a “hole” as larger unionized firms “cut costs” and increasingly, rely on public education systems, and in a situation where unionization is declining.

Where provinces wish to participate, the government of Canada should look to help bridge this training gap by providing incentives and working with small to midsize business, including nonunion ones, to provide apprenticeships. Discussions and efforts should also be made surrounding additional areas for mid-skill worker apprenticeship design in industries that require mid-skill workers but do not fall into the traditional categories.

Attention should also be paid to providing income assistance while apprenticing for workers in transition, and for young people struggling to attain employment to lift them out of low income. In both cases, workers may be struggling, let's say on a \$18/hr job, and unable to accept the lower wages that traditionally accompany apprenticeships. A “top up” to ensure a “living wage” would provide these workers in transition and young workers with an opportunity not afforded in other settings.

The intention here is two-fold, a well trained workforce can be attractive to investment, and small business is an area where the jobs are less mobile (i.e. highly unlikely to head offshore).

Some 40% of small businesses report that finding the right workers is limiting their growth (and therefore the overall availability of jobs). Unleashing the possibilities to train or retrain workers within the small business sector could help to fill the mid-skill job dearth. This could be very important to workers in transition (older workers whose long-term employer closes down) and youth who are in the bind of not having experience and needing to gain it.

To some extent, this is a “build it and they will come approach”, however in combination with efforts to identify and develop industries of the future, it fits well. If, for example, “right to repair” legislation were to be enacted, we could anticipate that small business would start up to fill the repair niche, and existing repair businesses would expand – both would need to train workers, and those jobs would provide useful options for workers in transition and/or youth.

*(Submitted by: The Need for Quality Stable Jobs: SLCBC Working Group)*