MAKE MANUFACTURING WORK AN INDUSTRIAL POLICY FOR THE 21st CENTURY



October 2016

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Introduction

The foundations of the United Steelworkers (USW) were laid during the great industrial and manufacturing surge of the mid-20th century. The union started out in the steel industry, which employed tens of thousands of Canadians and literally built cities like Hamilton and Sault Ste. Marie, Ontario. Over time, our union grew to represent workers in resource extraction, forestry and value-added manufacturing of everything from tires and auto parts, to furniture, appliances, forest products and more. Through this growth we have become one of Canada's most diverse unions, representing men and women working in every sector of Canada's economy.

Our experience over the last several decades shows that government policy and inaction in the manufacturing sector has deeply eroded the middle class in this country. Middle class stability has been replaced by insecurity, inequality and uncertainty. This trajectory must be reversed for the sake of future generations. This policy paper grew out of a submission filed by the USW in response to the House of Common's Standing Committee on Industry, Science and Technology's call for submissions on Canada's manufacturing sector. This paper touches on several important areas: key sectors such as steel, auto and forestry; trade policy; and the need for an environmentally sustainable industrial policy. Each of these topics is explored with the goal of truly benefiting Canadians through job creation and growth in manufacturing.

Steel: Made Strong in Canada

Support for the steel manufacturing sector is clearly in the country's economic interest. The sector produces \$14-bilion worth of goods annually, with half of the industry's annual output exported to foreign markets across the world. While employment numbers are far lower than they have been in the past, 22,000 Canadians are still directly employed by the steel industry. Today, Canada's steel industry is high-tech and diversified, efficiently producing high-quality products.

And yet, as of October 2016, two of Canada's major integrated steelmakers, US Steel Canada and Essar Steel, have both been in bankruptcy protection for over a year. Two communities, Hamilton and Sault Ste. Marie, Ontario hang in the balance as these two major employers seek to restructure. The USW has been working tirelessly for almost two years to try to save the good jobs provided by these employers, as well as the pensions and benefits that support tens of thousands of families in Ontario. We have been working hard with investors, the steel industry and lenders. We have received significant support from an engaged Ontario Provincial Government. However, despite repeated requests for help, the Federal Government has been completely absent in this effort. We have received no offers of assistance from the Federal Government for investment, retraining, or labour adjustment. These are all areas where historically the Federal Government has provided assistance.

This failure of the Federal Government to assist in saving the steel industry is part of a broader problem. For decades Canada has not had a real industrial strategy in Canada. This is in stark contrast to several other industrialized countries. Germany, for example, has had great success with their modern manufacturing strategy. Canada, on the other hand, has failed to support its manufacturing sector. The crisis in the steel industry is an example of that failure. The Government of Canada's 2016 federal budget, which called for billions of dollars for infrastructure spending, made no commitment to the purchase of Canadian-made steel. This lack of government support must be reversed.

Drive with Canadian Auto Parts

More than 100,000 Canadians are directly employed in vehicle and parts manufacturing, and many are USW members. This accounts for over 7 per cent of all manufacturing jobs in Canada. The automotive sector anchors the larger manufacturing sector. But over the last decade the auto sector lost 53,000 jobs.

In spite of this decline, auto parts operations based in Canada typically enjoy a labour cost advantage compared to their US-based counterparts. The Canadian industry has a highly-skilled labour force as well as a strong research and development network with one of the lowest cost structures among advanced economies.

Leveraging the sector's competitive advantages to reverse its troubling decline requires direct government policy measures. This includes ensuring that Export Development Canada's top priority is both attracting and supporting Canadian-based factories by making investment incentives competitive, efficient, and including sensible tax features.

Give Forestry a Chance

In addition to steel, the USW is also a leader in Canada's forestry sector, with 17,500 members working in forests, mills and other production facilities. The past decade has been difficult for Canadian workers. Low lumber prices, a relatively-high Canadian dollar, slumping US demand, growing competition from South America and Asia, and a lack of capital investment in manufacturing have all led to a decrease in output and job losses. Alarmingly, these conditions persisted while the Canada-US Softwood Lumber Agreement was in effect. This agreement has still not been renewed as of late 2016.

By allowing companies to export large numbers of raw logs, without any value-added in Canada, governments are failing domestic workers and communities. The federal government has a key policy role in promoting growth in the sector. An export tax on raw logs would incorporate the difference between export price and domestic price and the revenue from the tax could be used to help promote the value-added sector. By taking the lead, the federal government can reverse the industry's decline and ensure that the sector reclaims its status as a sustainable, renewable, value-added industry, providing meaningful, lasting employment.

Trade and Manufacturing - part of the same challenge

Contrary to popular opinion, the USW is not opposed as a matter of principle to trade. The Steelworkers recognize the important role that trade plays in building and sustaining a healthy, robust economy. In light of this, the USW believes that trade policy and manufacturing policy should be approached as one comprehensive economic challenge. Free trade agreements alone have never satisfied the imperative to build an economy that serves Canadians' need for a stable, sustainable future. Persistent trade imbalances and the decline of manufacturing speak to the lack of a coherent industrial policy. Unfettered trade and minimal government intervention has meant that Canadian exports are biased to favour our comparative advantage in raw materials and resources.

While the USW represents more workers in the mining sector than any other union in Canada, we believe that a trade policy that relies predominantly on resource extraction neglects jobcreating, value-adding and productivity-enhancing manufacturing. Recent mega-trade agreements, such as the Trans-Pacific Partnership (TPP) and the Canada-EU Trade Agreement (CETA) only further entrench a trade regime that takes away governments' ability to develop sectoral strategies that encourage manufacturing growth. As a result, the USW strongly urges the Government of Canada to reject the proposed TPP and CETA. Its efforts should instead be focused on industrial policies that are not constrained by trade deals that are neither free nor fair. This is not protectionism. This is pragmatism.

Industrial Strategy and the Environment

The USW has played an active role in reconciling the need for good, unionized jobs in Canada's manufacturing and extractive sector and protecting the environment. Action on jobs and the environment must be incorporated into a new industrial strategy. Clean energy investments, shifts in subsidies, targeted tax incentives and the development of clean energy and

transportation infrastructure may increase the number of well-paid, family-supporting, unionized jobs; but only if these are the explicit goals of a manufacturing or industrial policy.

A greener economy must aim to protect and build communities, not kill them. This policy paper details how to obtain the products needed in manufacturing, while also emphasizing a transition towards the use of renewable and cleaner energy. Of course, any transition must include a focus on jobs and training, along with collaboration with First Nations and other communities.

Section 1 Manufacturing and trade policy: making the link

The USW firmly believes that Canada's trade and manufacturing policies must be approached as one comprehensive economic policy challenge. The lack of coherent industrial policy since the 1988 Canada-US trade deal is a key factor influencing Canada's declining manufacturing base, and persistent trade imbalances. Further, the negotiation of mega-trade agreements, such as the TPP and CETA entrench a trade regime that removes the policy space necessary to develop sectoral strategies to encourage manufacturing growth. Canada needs a more balanced and comprehensive trade and manufacturing policy.

Trade policies since the 1980s have privileged unfettered trade and minimal government intervention. As a result, Canadian exports have been biased in favour of the country's comparative advantage: natural resources. Canadian manufacturing exports as a percentage share of total exports has been in steady decline since 2001. Likewise, Canada's trade balance in manufactured products has deteriorated from approximate balance ten years ago to a deficit of around \$100 billion per year today. This deterioration in Canada's manufacturing terms of trade has been accompanied by a rise in the share of mining, oil and gas exports.¹ From 2000-2014 manufactured goods exports declined from 64% to 46% of total exports, while commodity exports increased from 30% to more than 50% of total exports.²

Although many Steelworkers are employed in the resource sector and benefit from growth in primary resource extraction, the USW firmly believes that a trade policy that relies predominantly on resource extraction does not fully promote job creation. As John Jacobs of the Canadian Centre for Policy Alternatives argues, not all industries create jobs equally. One consequence of Canada's deteriorating manufacturing trade balance is that the "job intensity" of our export base is also declining. Jacobs estimates each one billion dollars in exports from the resources extracting sector can be implicated in the creation of 580 direct jobs. The same one billion dollars of trade in manufactured goods produces roughly 2,300 jobs. Data drawn from Statistics Canada indicates that resource exports comprise 21% of value-added exports but only 4% of employment. Manufacturing on the other hand, provides 52% of value-added exports and 40% of employment.³ In short, Canada is exporting goods that create few domestic jobs and importing goods that create jobs overseas.

Reliance on the export of primary commodities brings other structural challenges that impact Canada's manufacturing base. Exchange rate volatility has contributed to the decline in manufacturing jobs and many economists estimate that the recent fall in the Canadian dollar will likely not be enough to boost manufacturing to pre-2008 levels without additional government intervention.⁴ Over-reliance on primary goods exports has also created challenging fiscal circumstances for governments, just when they need these fiscal levers to spark growth. The situation in Alberta is quite telling in this regard.

¹ Moeller, "Canada's Trade Performance: An Examination of Eight Indicators."

² Jacobs, "Impact of TPP Tariff Removal on Canadian Trade.", p12

³ *Ibid* at p16.

⁴ See for example, Freeman, "A Weak Loonie Was Supposed to Boost Manufacturing. Here's Why It Hasn't | Toronto Star."

The institutions and agreements governing trade and foreign investment are also immensely important for the future of manufacturing in Canada. Modern trade deals from NAFTA onwards preclude the development of spin-off strategies and policies that increase the level of processing of raw goods. Recently negotiated mega-trade agreements, such as the TPP and CETA further entrench a trade regime that removes the policy space necessary to develop sectoral strategies to encourage manufacturing growth.

With regard to tariff reduction under the TPP, Jacobs argues that ratification of the TPP could be an obstacle to diversifying beyond extraction and exports of primary goods. Canada's imports from TPP countries not already covered by existing trade agreements are 93 per cent comprised of advanced manufactured goods. Under the TPP, exports of raw goods such as oil (Canada's single largest export to TPP countries) coal, copper and lumber are estimated to grow; while imports of value-added, processed and high-technology products such as automobiles and vehicle parts will increase. ⁵ Thus, the main opportunities for Canadian exports generated by TPP tariff reduction appear to be in the export of raw materials to be processed and transformed elsewhere.

Likewise, research from the Canadian Centre for Policy Alternatives argues that tariff reductions under CETA will cost 46,000 jobs, mostly in high value added manufacturing. In particular, automotive trade with the European Union (EU) and TPP partners is "precariously unbalanced." Europeans buy almost no Canadian made vehicles whereas EU automakers control roughly 10% of the Canadian market.⁶ Moreover, EU automakers currently have no assembly facilities in Canada. Since the geography of the auto parts manufacturing sector dictates that parts facilities usually lie near to the assembly plants they supply, there is little reason to assume that tariff reduction in autos under CETA will stimulate auto parts production in Canada.⁷

More worrisome however, are the limitations on a wide variety of industrial development policies contained in NAFTA, the TPP and CETA. According to the International Centre for Trade and Sustainable Development (ICTSD) in Geneva, the TPP and other similar treaties, "will result in an increase in operational constraints on industrial policy relative to those that currently exist under the WTO."⁸ The TPP and CETA prohibits a long list of performance requirements, such as technology transfers, domestic content or employment quotas, that states might want to attach to such agreements.⁹

Recommendations

The challenge for Canada's pattern of trade is our over-reliance on natural resource exports at the expense of developing our high technology value added manufacturing sectors. An industrial strategy, that includes a strategic trade policy, is necessary to drive stronger domestic processing of natural resources and for the development of desirable tradable industries which includes high-value tradable manufactured products.

⁵ Jacobs, "Impact of TPP Tariff Removal on Canadian Trade.", p10-15

⁶ Stanford, "CETA and Canada's Auto Industry Making a Bad Situation Worse."

⁷ Ibid.

⁸ ICTSD, "New Industrial Policy and Manufacturing: Options for International Trade Policy.", p23

⁹ Jacobs, "Impact of TPP Tariff Removal on Canadian Trade."

In order to achieve this, the USW recommends the government not ratify TPP and CETA. If Canada continues down this path, industrial policies in the future may only be focused on those areas that are not constrained by these treaties. Canada needs to pursue a comprehensive manufacturing strategy. However, by signing the aforementioned deals, Canada is relinquishing the very autonomy that gives our government the tools and flexibility required to pursue such a strategy.

On the issue of foreign investment, the USW also believes that trade and investment treaties must preserve the government's ability to implement performance requirements for foreign investors. Future trade agreements must allow local procurement, training requirements and other offsets to stimulate local manufacturing.

Finally, the Investment Canada Act's "net benefit" test, which has done little to insure that foreign investment brings broader benefits to the Canadian economy, must be replaced with a better cost-benefit test. A more robust foreign investment regime will include binding commitments to production and job levels, commitments to new investment in capital and technology, and pledges to expand Canadian content in supply contracts and other inputs.

Section 2

Green industrial policy: Manufacturing in Canada and a just transition

The USW believes that Canada's manufacturing policy must promote the development of good unionized jobs in the manufacturing sector while protecting the environment. Although the industries and sectors employing many of our members are often high-emitting industries, the USW supports the development of a manufacturing policy that minimizes the impact of industry on the environment. In particular, the federal government's manufacturing strategy must account for energy-intensive, trade-exposed industries (EITEs). These industries (some of which include, steel, iron, pulp, paper, and mining) are some of the most threatened by both trade and their high emissions.¹⁰ Consequently, policies that implement these sectors must be centred around just transitions for workers who may be displaced from their jobs. The concept of a 'just transition' was developed by the international labour movement and "aims to minimize the impact of environmental policies on workers in affected industries and communities and to involve workers in decisions about their livelihoods."¹¹

In order to combat global climate change and other global environmental problems, Canada must address the disconnect between stated climate goals and actual policies. One such disconnect is the large subsidies and investments directed towards capital-intensive and environmentally harmful energy production. For example, Blue Green Canada's 2012 report calculates that the federal government provides \$1.3 billion in taxpayer money to oil and gas companies.¹² How these subsidies fit into the government's recently signed COP21 commitments is unclear. Although addressing such environment-industry policy disconnects may displace some workers, clean energy investments, shifts in subsides and targeted tax incentives may increase the number of well-paid, equitable, unionized jobs, though only if it is an explicit goal of Canada's manufacturing or industrial policy.

What does environment and climate focused manufacturing look like?

Some of the largest greenhouse gas emissions emanate from the oil and gas sector, transportation (especially freight) and electricity generation.¹³ Thus, in order to truly reduce the overall environmental impact of manufacturing, the government must utilize a systems approach, anchored in the following three key areas:

i) Clean energy and manufacturing

There is a direct and indirect connection to manufacturing that emerges from a shift towards cleaner energy sources. First, production of wind and solar equipment could help stimulate new parts of the manufacturing sector. Secondly, if one accounts for the full product cycle and its

¹⁰ Environment Canada, "Canada's Emissions Trends", July 2011.

http://www.ec.gc.ca/doc/publications/cc/COM1374/ec-com1374-en-s3.htm

¹¹ Cooling, Karen, Marc Lee, Shannon Daub and Jessie Singer, "Just Transition: Creating a green social contract for BC's resource workers." Canadian Centre for Policy Alternatives, 2015.

¹² Blue Green Canada, "More Bang For Our Buck: How Canada Can Create More Energy Jobs and Less Pollution." 2012.

¹³ Marc Lee and Amanda Card, "A Green Industrial Revolution: Climate Justice, Green Jobs and Sustainable Production in Canada." Canadian Centre for Policy Alternatives, 2012.

environmental impacts, using and promoting clean energy use by industrial consumers reduces the overall impact of manufacturing, while creating and maintaining good, unionized jobs in Canada. Consequently, the USW recommends:

- Shift subsidies away from fossil fuels, while recognizing that some extractive industries remain necessary, including metallurgical coal for steel manufacturing
- Promote cleaner energy sources for industrial consumers: providing subsidies or tax breaks to offset any increased costs in order to prevent carbon leakage
- Develop wind, solar, tidal and geothermal power
- Produce selected biofules
- Ensure the inclusion of a jobs and training focus, along with collaboration with Indigenous/First Nations Governments and other communities

ii) Transportation

According to the Green Economy Network, "the transportation sector was responsible for 28% of Canada's Greenhouse Gas emissions in 2013."¹⁴ It is clearly a key component to any green industrial strategy. If designed properly, a strategy to reduce the impact of transportation on the environment can have a positive impact on domestic manufacturing. As a result, the Steelworkers recommend:

- The federal government assist in the creation of inter-city rail systems and electrification of the railways in Canada (this includes both freight and passenger)
- Expand funding to cities for public transit expansion
- Further promote fuel efficiency standards for transport and personal vehicles
- Provide Investment incentives to ensure domestic electric vehicle manufacturing

iii) Building infrastructure

Retrofitting existing buildings to make them more energy-efficient could create jobs across the country. The federal government should target both existing federal buildings for retrofits, as well as provide incentives for private homeowners to improve the energy efficiency of their homes, through tax breaks and subsidies. Improving energy efficiency can also help low-income people in Canada, by reducing energy bills. Some particular recommendations include:

- Tax breaks and regulations on buildings' energy efficiency and materials (ex: promote the use of wood products which are known for their efficient carbon storage)
- Promoting the use of domestically-made green building materials (ex: using Canadian made steel in Canada is more environmentally friendly then foreign made steel)
- Grants for low-income housing
- Working with the provinces on training for workers

¹⁴ Green Economy Network, "Making the Shift to a Green Economy: A Common Platform of the Green Economy Network." 2016

iv) Carbon leakage

In many of the energy intensive trade exposed sectors any action on reducing the environmental impact of these industries (especially through pricing greenhouse gas emission) can lead to carbon leakage. Carbon leakage occurs when one jurisdiction imposes a price on greenhouse gas emissions or other environmental standards, which results in production relocating to another jurisdiction with lower environmental and labour standards, leaving the problem ultimately unsolved. In Canada, there is a fear that provincial carbon pricing schemes will lead to carbon leakage. Energy intensive trade-exposed industries such as steel and aluminum are at particular risk, as manufacturers may relocate to jurisdictions with lower environmental and labour standards.

To combat the issue of carbon leakage and to ensure that both industrial consumers and producers bear the responsibility of reducing emissions, USW contends the federal government must impose border carbon adjustments. Provinces in Canada, including Quebec, Ontario, Alberta and B.C. all have forms of carbon pricing mechanisms. Ontario and Quebec, which are both part of the Western Climate Initiative, along with several U.S. states, currently provide emissions exemptions to its energy-intensive trade exposed industries, such as steel manufacturing. This is only a short-term solution to protect these industries that provide well-paid, unionized jobs. A longer term, more comprehensive solution would include border adjustments on products manufactured in jurisdictions with less environmentally friendly processes and cheaper labour.

This could be achieved through a collaborative effort in which the federal government works with its international partners to develop a standardized mechanism for calculating carbon. This would facilitate Canada's ability to understand the true environmental impact of steel and other materials and would pave the way for ensuring that producers cannot simply move their production to jurisdictions with lower environmental and labour standards.

v) Training, adaptation of work and just transition

The Steelworkers strongly assert that any manufacturing or industrial policy must contain specific policies on just transition. Canada must promote individual and community supports as part of a just transition. We must also encourage adaptation and explore restructuring or transformation of existing workplaces and industries to make them viable as we seek to reduce climate and environmental impacts.

A just transition should include replacement incomes or adjustment allowances for affected workers through the Employment Insurance system for example. It is also necessary to invest into communities and regions that are hit particularly hard (such as those reliant on oil and gas, or those where a declining sector dominates the local economy).

Beyond income and community supports, we emphasize that the shift towards a greener manufacturing and industrial policy can have a net positive impact on jobs. Blue Green Canada estimates that the job creation potential of the \$1.3 billion that is currently used to subsidize oil

and gas companies would create about 18,000-20,000 jobs in clean energy sectors, as opposed to the roughly 3,000 jobs in oil and gas extraction.¹⁵

As part of any just transition, retraining programs must be established for displaced workers. A comprehensive training and green employment strategy must also include an equity focus, with particular attention to involving communities who have been historically excluded from high-paying, manufacturing jobs or who have been most affected by environmental destruction, often lower-income people and people of color. Inclusion and equal voice and power must also be given to indigenous Canadians, including input on resource development, and access to training and jobs programs. Additionally, the gap between training programs and employment must close – the government must tie together public works or public procurement processes related to a green manufacturing and jobs strategy, with specific hiring directives aimed at displaced workers, retrained workers and historically marginalized workers. Overall, planning for a just transition should include equal participation from workers. USW supports the International Trade Union Confederation's assertion that "workers must be involved in the design of their future."

The federal government's role in this process should be to work and co-ordinate with provincial training, education and apprenticeship programs, connecting employers and workers through these programs, and working with indigenous communities and governments. The federal government also plays a key role in providing economic assessments of communities and sectors in Canada: any broad manufacturing policy that promotes a shift away from reliance on fossil fuels, prices carbon, and shifts focus on what we are producing, must include thorough employment assessments to determine how individuals and communities may be affected. Additionally, the federal government has a strong role to play at the international level, to promote and ensure that a just transition framework is included in international climate negotiations and frameworks.

Recommendations

Overall, USW emphasizes the necessity of an industrial policy aimed at ensuring a more environmentally friendly manufacturing sector that keeps good jobs in Canada. We have laid out the particular attention that must be given to energy-intensive trade exposed industries and workers employed in those sectors. To this end, the USW recommends:

- Utilizing a just transition policy that includes input from labour and environmental groups
- Setting emissions reductions targets and other environmental targets
- Working with provinces to ensure co-ordination and to emphasize the employment/jobs component
- International trade compliance and pushing for strong labour and environmental rights/protections in international trade agreements

¹⁵ Blue Green Canada, "More Bang for our Buck: How Canada Can Create More Energy Jobs and Less Pollution." 2012.

- International climate and environmental convention negotiations: ensuring global compliance to GHG emissions reductions, developing a standardized means of measuring emissions from various industries, including steel and aluminum
- Border carbon adjustments to stop carbon leakage from the steel industry and to promote domestic wood manufacturing
- Domestic content requirements in auto making to ensure emissions and labour compliance
- Grids and transmission of cleaner energy for industrial use
- Building retrofit standards and subsidies or tax breaks
- Equal collaboration with indigenous peoples and governments to develop clean industrial strategies

Section 3

i) Auto sector

Canada's auto industry is crucial to the country's economic wellbeing. The industry is the number one contributor to Canada's manufacturing GDP, with vehicle and parts exports totaling \$74 billion in 2015. Moreover, the sector is a crucial source of middle-class jobs, as more than 100,000 Canadians are directly employed in the sector. It is important to note that many of these jobs are well paying, highly educated unionized jobs. In fact, 43% of Ontario's auto industry workforce has a post-secondary education, and the average salary within the sector is \$85,000.

Unfortunately, the industry has been experiencing a troubling decline in production and employment over the recent years. In 2015 manufacturers produced 126,000 fewer vehicles than the previous year. This represents a 5.3% year over year decline in production. Moreover, according to the Automotive Policy Research Centre, over the last decade, the Canadian auto sector has lost 53,000 jobs. A key reason for the industry's recent decline is Canada's declining share of North American investment in the field. According to Morgan Stanley, between 2011 – 2015, 3.5 million units of capacity was added to automotive manufacturers in North America. Of this figure, the U.S. received 63%, Mexico acquired 34%, and Canada received a mere 3%. As these figures make clear, recent investments have heavily favoured the U.S. and Mexico. In the case of Mexico, the country is rapidly transforming into a low-cost, export-friendly manufacturing jurisdiction. The U.S. is starting to benefit from a manufacturing renaissance prompted by "re-shoring." There has been a renewed emphasis by governments at all levels in the USA to support, attract and retain domestic manufacturing operations.

A similar renaissance is possible in Canada. As previously noted, the sector has a highly educated labour force. This workforce, and the products they produce benefit from the sector's strong research and development (R&D) funding. Foreign investors in Canada's automotive sector are supported by a vibrant network of universities, as well as research centres performing cutting-edge automotive R&D. Consequently, companies that develop and test electronic systems and devices in Canada typically enjoy an 18.5 % overall cost advantage when compared to their U.S. counterparts. Yet, not only does the industry benefit from a highly-skilled labour force as well as a strong R&D network, Canada also has one of the lowest cost structures among advanced economies. Canada has an overall cost advantage of 3 % over the United States. Moreover, according to KPMG, auto parts operations based in Canada typically enjoy an 11.2 % labour cost advantage compared to their U.S. counterparts.

Recommendations

Leveraging the sector's competitive advantages in order to reverse its troubling decline will require utilizing various public policy measures. One such measure includes, ensuring that Export Development Canada's top priority is attracting and supporting investments in Canadianbased factories. This measure could be supported by cutting the red tape around government investment initiatives. Developing a "one-stop shop" that serves to attract investment in Canadian assembly and parts plants has been identified by industry stakeholders as a key issue for them when deciding on facility investments. Finally, Canada must ensure its investment incentives are competitive, efficient, and include sensible tax features.

ii) Steel manufacturing

Supporting Canada's auto industry will have spillover effects into other crucial manufacturing sectors. One such sector is the steel industry. According to industry data, the Canadian automobile industry is currently the single biggest customer of Canadian made steel, as it represents 1/3 of the demand for Canadian made steel.

Supporting Canada's steel manufacturing sector is clearly in the country's economic interests. The sector produces \$14 billion worth of goods annually, with half of the industry's annual output exported to foreign markets across the world. Canada's steel sector supports the jobs of 22,000 Canadians directly. The average salary of these jobs is \$70,000 per year, which represents a total payroll injection of \$1.4 billion annually into the economy. Moreover, according to calculations by Spatial Economics, the steel sector has an estimated multiplier of 5:1, meaning each steel job supports five jobs indirectly. Consequently, the industry is said to support 100,000 jobs indirectly.

It is important to note that the wealth of economic benefits provided by Canadian-made steel comes at a fraction of the environmental footprint of foreign-made steel. Due to comparatively clean sources of energy, using Canadian-made steel in Canada utilizes significantly less carbon than using foreign made steel. As Blue Green Canada documents in its study, emissions from steel produced in Canada are roughly 56 kg/tonne, contrasted with 600 kg/tonne in China and 900 kg/tonne in India. Thus, supplying the Canadian market with Canadian-made steel not only makes economic sense, it is environmentally responsible.

Unfortunately, the opposite has been happening. This is due to a lack of government support for the industry in the face of Chinese overproduction and dumping. In 2014, with the help of government subsidies, China dumped 138,893 tonnes of rebar into Canada. Dumping is defined as the export of a product at a price that is lower in the foreign market than the price charged in the domestic market. The government of BC attempted to argue before the Canadian International Trade Tribunal that it was in the "public interest" for it to be granted an exemption to use B.C. taxpayer dollars in order to purchase dumped rebar from China. This was in spite of the fact that Canadian Steelworkers at AltaSteel in neighbouring Alberta produced the exact same good at competitive prices and under stricter environmental standards. Moreover, the 2015 federal budget, which calls for billions of dollars in infrastructure spending, makes no mention of whether Canadian-made steel will be purchased. This leaves open the possibility that Canadian taxpayer dollars will be used to purchase dumped Chinese steel in order to build public infrastructure.

The combination of market challenges and lack of government support have left the once prosperous Canadian industry reeling. Essar Steel Algoma is currently operating under the Companies' Creditors Arrangement Act putting 2,700 direct jobs at risk. Stelco, after its sale in 2007 to US Steel, entered creditor protection in 2014, with over 7,000 local pensioners left owed pension and health care benefits. Many related small and medium enterprises and suppliers have

downsized or gone out of businesses across Canada due to the challenges experienced by the industry.

Recommendations

One key way to reverse the industry's troubling decline is through Canada's approach to international trade. In particular, the government must use its current trade talks with China to pressure it to bring down its overproduction. China is a non-market economy that accounts for 2/3rds of the world's current steel glut. Moreover, the government must amend its trade laws to allow unions to launch trade complaints against countries dumping products into Canada. Numerous other jurisdictions such as the USA, EU, Australia and New Zealand afford workers such a right. By enabling Canadian workers to launch similar trade complaints, workers can take a leading role in defending their jobs and communities from unfairly dumped goods.

iii) Forestry sector

The last decade has been a difficult one for the 17,500 Steelworkers working in the forestry sector. Low lumber prices, a relatively high Canadian dollar, slumping US demand, growing competition from South America and Asia, and a lack of capital investment in manufacturing have all lead to a decrease in output and job loss. Between 2000-2015, employment in Canada's forest industry decreased by 41%. The revenue generated by Canada's forest industry suffered a similar steep decline, as it decreased by 30% in the same period.

Despite the troubling decline of the forest industry, the sector is still a significant contributor to Canada's trade, particularly in the growing Asia Pacific region. The growth of this region as a market provides a host of opportunities but also challenges. While exports to Japan and Korea are generally comprised of value added products, China and India are importing growing volumes of raw logs. China in particular has seen its imports of raw logs grow exponentially over the recent years. The growth in demand from China, combined with deregulation in the sector, has led to a 300% increase in the export of raw logs from BC in the last five years. By allowing companies to export such large volumes of raw logs with no value added work incorporated into them at domestic mills, governments are failing to promote the employment of thousands of potential forest workers. In fact, analysts suggest that raw logs shipped from BC in the last five years at 10 medium sized sawmills.

Recommendations

While most of this wood is exported from private and provincially regulated Crown lands, a significant amount is harvested from federally regulated Crown lands. As a result, the federal government has a key policy role to play in helping promote the growth of the sector. One clear way to do that is by placing an export tax on raw logs that would incorporate the difference between export price and domestic price. The revenue from the tax could be used to help promote the value added sector. In addition to placing a levy on the export of raw logs the government must demonstrate the value of finished lumber products and increase opportunities for their utilization. Canada must embark on a marketing campaign that makes wood the first

choice for home construction both domestically and abroad. Internationally, these efforts should include best practices for construction, advice to foreign governments on implementing building codes suitable for wood-frame, and demonstration projects that showcase the best of Canadian wood products.

Here in Canada, the federal governments should strive to ensure that construction of public buildings utilizes a wood first policy. The use of wood is not only a more green choices due to its effective carbon storage, it is a practical building material that provides endless possibilities for design and construction. Several provincial and municipal governments have supported a wood first policy and have, or are in the process of, amending their building codes to ensure such construction is safe and reliable - namely BC, Ontario and Quebec. Some of these efforts however have been limited to six stories even though professional engineers and manufacturers have demonstrated the ability to safely build even taller buildings. By taking a leading role in key policy areas, the federal government can help reverse some of the troubling declines the forest industry has experienced over the last 15 years, and ensure that the sector returns to its status as a key value-added industry.