A Review of Alberta's Economy in 2019 and Overview of Ways to Eliminate Fossil Fuels Using Marxism

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The world economy has become increasingly globalized in recent decades. As countries continuously trade with each other and become dependent on imports and exports, the ties between economies strengthen. Though this is beneficial for economic growth via Ricardian comparative advantage, the risks facing an economy increase as events that occur in one country have effects on economies in others. Energy products make up a large percentage of Alberta's exports (CBC News, 2019). Therefore, global fossil fuel industry demand and supply have a great effect on the Albertan economy. The future of fossil fuels weighs heavily on the Albertan economy, as potential decreases in demand will pose issues for the prosperity of the province. Given the current climate crisis, the fossil fuel industry will face many challenges in the near future. Climate change will bring about drastic changes to the world economy as it threatens development and natural and human life. Ensuring the success of the human race on planet Earth requires extensive changes to societal function and economic structure to mitigate climate pressures. The deadline for these integral changes becomes increasingly close as natural disasters of unforeseen magnitude continue to pose threats to human civilization. The recent wildfires in Australia show the type of events that may become regular if global temperatures continue to rise (McGrath, 2020). In Alberta, events such as the Fort Mcmurray fires of 2016 have been linked to anthropogenic climate change (Derworiz, 2019), and rising global temperatures will only increase the risk for these events and their magnitude. Therefore, prioritizing climate change and reducing global emissions should be at the forefront of policies if the frequency of events such as these is to be minimized. Redesigning the economy to favour the environment and uplift all citizens will have positive effects on the human race, increasing class equality and quality of life for all.

In this discussion, the recent Albertan economy will be analyzed and evaluated using Marxist principles to provide suggestions to aid the transition away from fossil fuels. As an economy encompasses many facets, it is imperative to look at all of the pieces of the equation and their effects on each other. Though this discussion is focused on fossil fuels and their effect on the Albertan economy, other parts of the economy are examined as well for two reasons: to understand the effects that the fossil fuel industry has on the rest of the economy, and to examine how these sectors can benefit from shifts in the energy industry. Therefore, it is integral to analyze many pieces of the economy as they are all directly or indirectly related. Additionally, from the overview side of this discussion, discussing the current political party's budget is essential in understanding the current political economy and how the party's decisions have an effect on the future of the economy. While decisions in healthcare, for example, may not be explicitly related to the fossil fuel industry, the effects that the fossil fuel industry has on the economy have potential effects on healthcare in terms of funding. In a sense, it is looking at government spending like an equation, where expenses (such as healthcare and education) are on one side and revenues (such as fossil fuel royalties) are on the other. The last piece of the puzzle, which lays outside this equation but structures the weights of the variables involved, is the economic ideology. Thus, using Marxism over capitalism -- for reasons mentioned later on -- is not only a different approach to the norm but an opportunistic viewpoint taking a position that is no longer mainstream. Though Marxism is thought of as a "failed experiment," this statement relating to Russian communism and world socialism does not accurately describe the truly *intended* outcome of Marxism and harbours fallacies. The essence of Marxism became distorted in practice and therefore the view the world had of "Marxism" based on a reality created based

on some of the principles may not see the whole picture that true Marxism intended to create (Namboodiripad, 1991). In effect, tying together the many points outlined, uniting the working class via Marxism would put more power into the community, therefore strengthening the workforce to accommodate the necessary economic adaptations required to mitigate the impending fall in world oil demand.

Economic Overview: 2019

In 2019 the Albertan economy faced hardship that may be described as a mild recession. Though the rest of Canada showed economic growth over the year, Alberta only made a slight increase in real GDP (RBC Economics, 2019). It is becoming more obvious that the cycles facing the Albertan economy are changing, shifting away from the predictable "boom and bust" of resource economies to a more unpredictable future.

Unemployment, though lower than in the past few years, remains above the Canadian average. However, this decrease in unemployment is not entirely due to increased employment, but because of a decrease in the size of the labour force meaning that many are becoming discouraged and taking themselves out of the labour pool. Additionally, during the last months of the year, many full-time jobs were lost while part-time jobs were gained (Government of Alberta, 2020). This means that a lot of meaningful, career-building full-time jobs have been replaced by part-time employment. This suggests a great deal of underemployment in the economy as many who want full-time employment are only able to get part-time and many who have the education and experience for full-time careers are not achieving their full potential to

contribute to the productivity of the economy. Therefore, though the unemployment rate has decreased, the reality of the situation is that overall joblessness and job dissatisfaction has increased. This is a great example of unemployment rates not painting an accurate picture of what is really going on in an economy and how it is important to always read the "fine print" of what statistics really mean. Retail sales are down as consumers are less confident in the economy and their personal finances (Government of Alberta, 2020). When joblessness and underemployment are rampant, this correlation is expected as disposable income for non-necessities is not as great as it once was. As previously stated, this is not the same economy that Albertans once enjoyed in the era of the booming fossil fuel industry. Further stresses on the economy -- such as the impending fall in world fossil fuel demand -- may not be dealt with as easily when the economy is already struggling.

Forecasts show that the economy will pick back up in 2020, and potentially face a boom in 2021 as oil and gas production and investment increase. However, these variables are not entirely certain as there are many factors at play that could affect the outcome of the future economy.

A large factor in the current economy is the budget plan of the UCP and its plan for public sector funding. As discussed later in this study, the public sector faces many cuts especially in education and health care (McIntosh & Hussey, 2019). The impacts of this will reduce the productivity of Albertan labour as good healthcare and education become less accessible to the general public. Cuts to supports for low-income citizens, post-secondary institutions with less job market applications and enrollment rates, and pushes for more privatization of public services steer the economy towards one that favours the capitalist system

in that those who are in the lowest income percentiles may find it harder to keep up and those who choose market-serving paths in big universities will be favoured. As seen in capitalist ideology, this budget plan favours the rich and puts extra pressure on the less fortunate. As the UCP will remain in control for the next few years, this budget will shape the economy going into the 2020s. With a likely peak and decrease in fossil fuel demand occurring potentially as early as 2023 -- as discussed later in this study -- projections that Alberta's fossil fuel royalties and industry will increase in the future are terribly optimistic. The idea that Alberta's days of the booming economy of the 2000s will come back is unrealistic, and not planning for future losses in the fossil fuel industry is dangerous. The UCP budget forecasts putting in three new pipelines during its term and these predictions may fall short given past issues with putting pipelines in and the recurring fact that they may not be the smartest bet for the future of fossil fuels.

The Albertan economy may face challenges and harsh realities in the coming years. The bulk of hardships facing the economy will place undue stress on lower classes and those attempting to enter the market via post-secondary education. The gap between the richest and poorest may grow as corporate taxes have been reduced and income taxes on the public have increased. 2019 may have been rough for many Albertans, 2020 may be better, but the future going into the 2020s may become more ambiguous as world economic factors put pressure on the fossil fuel industry.

Why Fossil Fuels Are Not the Future

Anthropogenic climate change is a fact that affects every person on the planet. The world is entering an era of drastic change and potential loss of human rights because of the conditions created by climate change. In the future, when basic needs for survival such as food, water, and housing become increasingly inaccessible the gap between the richest and poorest will become greater and deadly for those at the bottom of the income range. While the rich may be able to shelter themselves from the consequences of climate change, those in unfortunate situations and in developing countries may face extreme outcomes. Despite their contributions of only 10% of world emissions, the world's poorest in developing countries will face an estimated 75% of the costs of climate change. Where the world has made strides in development climate change has the potential to undo these efforts. Climate change, therefore, is the biggest issue facing the human race as humanitarian issues will only worsen with unmitigated effects from climate change (Carrington, 2019).

The oil and gas industry faces many potential issues in the future given its relation to the climate crisis: burning petroleum products and their extraction contributes to climate change. Though some organizations predict increasing oil demand into the 2040s (Doman, 2017), others have made much more realistic forecasts of peak oil demand occurring as early as 2023 (Danigelis, 2018). This peak is due to a handful of reasons, primarily due to the increase in renewable energy demand. It is unrealistic to think that the oil and gas industry will continue to succeed given the state of the planet. Though the demand for petroleum products has always been relatively inelastic, advancements in renewable energy, public transit, and sustainable

manufacturing are increasing the elasticity of the demand for the product. The transition from oil and gas to renewable energy is forecasted to play out as have energy revolutions in the past: innovation (2% market penetration), peak penetration (5%-10% market penetration), rapid change (10%-50% market penetration), and endgame (over 50% market penetration). It is the peak penetration phase that is most important in this context, as that is when the demand for oil and gas will peak. Given the current and forecasted expansion rates of renewable energy technologies, this phase will occur in the 2020s (Carbon Tracker, 2018). This peak in demand for petroleum products will greatly affect Alberta, as competitors on the global stage will be able to keep up with decreasing demand, and therefore falling prices, more easily. Alberta oil is high-cost and when demand falls, low-cost options such as oil from the Middle East or American shale will prevail. Prices have already begun to decline and will not return to the highs they once were in the 2000s (Riley, 2019). The systemic risk to investors will continue to increase as demand falls. Fixed assets in the oil and gas industry pose large losses to investors as they become stranded.

On the demand side, emerging markets with fewer ties to the fossil fuel industry are more likely to choose renewable options for their energy demand over costly, ecologically damaging fossil fuels (Carbon Tracker, 2018). Renewable energy is already second to fossil fuels in world energy production. As costs continue to decline, the deployment of these technologies such as solar photovoltaic (PV) will increase. In fact, the costs of generating energy via distributed solar PV (panels distributed across commercial and residential buildings) are less than retail prices for electricity in most countries (Reuters, 2019). Additionally, many countries have begun shifting away from fossil fuel use with policies against gas and diesel-powered vehicles. Norway is

leading the way towards renewable automobiles because of great incentives from the government. Electric cars made up 60% of car sales in Norway last spring. Regardless of their position as one of the world's largest natural gas producers, Norway is making incredible strides towards being more climate-friendly (Chappell, 2019). Other countries such as the UK, France, Germany, China, and India have also set targets to ban the sale of new gas and diesel-powered cars (Petroff, 2017). Losing demand and production of these vehicles from China could have great effects on the world market for automobiles, as China is the world's largest market for them, both in supply and demand (Wagner, 2020). In India, cars are becoming more affordable for the middle class, posing a large opportunity for demand as this group enters the market. With targets set to only sell electric cars by 2030, India's middle class will have the opportunity to buy zero-emissions vehicles and potentially leapfrog other countries as first-time car owners buy electric (Petroff, 2017). With the knowledge of these economic factors when it comes to the fossil fuel industry, it is extremely unwise to not plan and prepare for this decrease in demand. In terms of Alberta, this future fall in demand for fossil fuels could spell disaster without mitigation and planning. In the 2017-2018 fiscal year, over ten percent of Alberta's revenue came from fossil fuel royalties. This number is much lower than that before the 2014 crash when it was over twenty percent (Riley, 2019). Additionally, many Albertans rely on jobs in the industry as in 2017 they accounted for just over six percent of overall employment (Government of Alberta, 2018). Though losses in this industry may not be abrupt or overnight, they will occur and may occur a lot sooner than many would like to think. The bottom line is that "[y]ou can either have a managed transition off oil, in which you actually have a plan and look after workers and communities, or you can have an unmanaged freefall," said Gordon Laxer, a political economist

and professor emeritus at the University of Alberta (Riley, 2019). Warnings such as this should be a wake-up call to those still touting the idea that Alberta can succeed with oil again. Policy needs to bring attention to the future of oil and find new ways to make up public funding that do not rely on fossil fuel revenues.

The UCP: Unrealistically Optimistic With Destructively Disorganized Priorities

In the spring of 2019, the United Conservative Party (UCP) led by Jason Kenney won the general election in Alberta. By the end of the year, it has become apparent that the plan made by the UCP will not benefit the general Albertan public in the long run.

For a long time, Alberta has managed to have some of the lowest taxes in the country coupled with a great amount of spending. This was possible because of fossil fuel royalties. However, these royalties are no longer as fruitful as they once were. This leaves a large gap in the revenue side of the equation, as without the tax returns that other provinces enjoy there is not enough revenue to balance spending (Markusoff, 2019). The economic future that the UCP's budget envisions is unrealistic. The theory of trickle-down economics, being followed in the UCP's plan to reduce corporate taxes, will most likely not provide the benefits promised to the general public. It's unsurprising that cutting taxes on the rich -- and subsequently increasing income taxes for the average Albertan to make up for the loss -- is not a plan that has the best interest of the public in mind. Plans to cut the carbon tax will have little effect on the public, especially since federal carbon taxes still exist and will continue to rise regardless of what the

provincial government wants (Wyton, 2020). Large shifts in economic growth occur through cycles that are out of the provincial government's control, and repealing taxes such as the carbon tax or corporate taxes will not have a big effect on economic growth (Riley, 2019).

Other ways that the Albertan public is being harmed in this plan include uncapping post-secondary tuition, cutting education and child-care funding, and cutting public sector jobs such as those in health care (McIntosh & Hussey, 2019). The new funding model for post-secondary institutions that bases funding on graduation rates and job market needs (Bennett, 2020) may pose risks for smaller institutions in rural areas and departments that teach degrees that are not directly tied to high-earning careers. This model favours programs that fit into the capitalist system, potentially discouraging disciplines such as fine arts or languages. Cuts to public sector jobs may be even larger than the numbers claimed by the UCP. Incredibly important jobs such as physicians, teachers, and correctional peace officers will be lost. The budget deems many of these positions as being overpaid and therefore cuts their pay. Additionally, it includes shifting in roles of jobs such as registered nurses (RNs) and licensed practical nurses (LPNs), putting more responsibility on LPNs as they are paid less. This is an attempt at saving money by reducing the hours paid to RNs and increasing those to LPNs. The plan also aims to reduce the supply of physicians which are already scarce in numbers. The negative effects of this section of the budget will be directly placed on the general public who will find it harder to find a reliable physician. Additionally, moves towards privatization in health care could increase the prices of things previously covered under public funding. Cuts to capital expenditures will greatly affect the Albertan public with delays in the opening of the new hospital in Edmonton and postponing the proposed Child and Adolescent Mental Health building

at the Royal Alexandra Hospital (McIntosh & Hussey, 2019). It is very clear that the public is being harmed in these decisions as access to affordable, regular, and high-quality health care is integral in public welfare. Cuts to Assured Income for the Severely Handicapped (AISH) and Income Support will make it even harder for those who already struggle in today's economy. Additionally, cuts to support for low-income citizens that rely on the Alberta Social Housing Corporation will put those already struggling at risk of serious poverty. Housing is very costly in Alberta, especially in Edmonton and Calgary, and these cuts will add unnecessary pressure on low-income families (McIntosh & Hussey, 2019). As an additional dish of stress on families, funding cuts for child care have the potential to lead to increases in fees and layoffs. The child-care market is fragile and this threatens families that rely on it and those wanting to go to work with children at home. Working parents, and especially working mothers, will face more troubles managing work and family balance (Johnson, 2019). A government should prioritize the public sector, as an economy is more productive when all of its citizens are healthy, educated, and well supported in the workforce. It is difficult to find arguments for cutting public funding, and therefore hard to justify decisions such as this. Relating back to the theme of this discussion, putting pressure on citizens and limiting their ability to access healthcare, education, or other integral public services makes a society more vulnerable when crisis (such as the impending loss in fossil fuel royalties) strikes.

Though one of the goals of the UCP's budget is to decrease the province's debt, projections show that their plans may not actually decrease it, but increase it above levels seen under the NDP. A large stake in their vision is that three new pipelines will be built within the next four years, which is counterintuitive to planning for a decrease in oil demand and would

increase the potential losses in fixed assets when that demand falls. These assumptions that pipelines will be built and that fossil fuel royalties will increase are very optimistic given the climate crisis, future oil demand, and the precedent set by past pipelines where legal challenges were prevalent. The UCP budget's regard for the climate is opposite to their assertion to find a "balance between environmental protection, and economic growth," as increasing oil production is not a climate-minded plan. Cuts to funding for the Ministry of Environment and Parks will decrease their ability to ensure proper care of Alberta's natural environments and manage emissions (McIntosh & Hussey, 2019). In a large offence towards the climate movement, the UCP's $30mi war room aims to target "misinformation" on the energy sector. This group will attack organizations such as Greenpeace with "classic bullying moves," said Keith Stewart, senior strategist with Greenpeace Canada (Stephenson, 2019). While integral public sector jobs are being cut, $30mi is being wasted on a dying industry. This is an attack on the public. Governments need to understand the severity of climate change and the risks facing the human race if it is not mitigated. The public needs to be the focus of policy as climate change and the continuous rise in living costs make life harder for the average Canadian.

Why Marxism is the Answer

Karl Marx predicted the fall of capitalism as it will be replaced by socialism and further to communism. Throughout history, capitalism has been somewhat beneficial to the development of human civilization as it encouraged innovation, efficiency, and discovery through competition. However, the capitalist system prevailing over most economies of the world is

hitting its limits as the planet can no longer keep up with its perpetual growth. The ideology that bigger is always better and that a business must always be growing to be successful has pushed the natural systems to their limits. In times of crisis, one must reevaluate the path that led to the situation and change the course for the future. In this case, keeping capitalism as the ideology the economic system is based on may not be akin to solving the issues that face the human race.

New generations frequently get blamed for the economy's downfalls. However, it would be more accurate to say that the economy -- created by past generations -- is to blame for the pains felt by young people. A deeper understanding of simple statistics on housing and vehicle purchase rates shows that though millennials are not buying as much as previous generations did, it is not for lack of want but because of financial inability. Housing prices have increased significantly over the past few decades while wages have not. Additionally, a larger percentage of new generations have pursued higher education -- more so than any other generation in the past. The consequence is that many are now deeply in debt, making goals of financial independence and "adulthood" hallmarks such as owning a house and car increasingly out of reach. Given the situation that faces the up-and-coming world leaders, it is unsurprising that this group favours left-wing politics and socialist policies (Thompson, 2018). Parents raised children with the notion that going to university would inevitably lead to a wonderful and fruitful future. However, the economy that young people entered punished their efforts with high costs of living and overwhelming debt. As Marx said, "[m]en make their own history, but they do not make it as they please; they do not make it under self-selected circumstances, but under circumstances existing already, given and transmitted from the past. The tradition of all dead generations weighs like a nightmare on the brains of the living" (Marx, 1852). This situation that has left

many favouring socialist ideas has created a path towards Marx's predicted fall of capitalism. New generations, unencumbered by unfavourable views of Marxism inspired by Stalin and the Soviet Union, see Marxism as a means for analyzing the current economy. Without calling for violent revolt, they see Marxist society being achieved through democracy and the reorganization of working people. This "revolution" would shift the balance of power out of the hands of the wealthy and refocus it into the community of working people and families (Jeffries, 2012).

Marxism can be used to analyze and reorganize the Albertan economy. Policies such as those that reduce corporate taxes and privatize services that were once public follow the capitalist ideology. Shifting economic structure towards communal production and publicly controlled and funded programs could alieve labour alienation and aid in the process of replacing fossil fuels with renewables. Marx developed a means for analyzing the political economy in two steps, first to reduce the "whole" into its simplest determinations and second, to take the newly defined parts back into the whole in which they reside (Shiell, 1987). Using this method of Marxist methodological holism, an economy can be analyzed for its merits and downfalls and how the properties of a part of the economy relate to others and the whole. This method will be used to provide suggestions for the Albertan economy to tackle issues facing the public and the future of the fossil fuel industry.

Eliminating Fossil Fuels Using Marxism

Understanding economic issues is a multi-disciplinary task as economics only covers the economic side; environmental science and sociology are needed to understand the impacts that changing economic policy can have. Marxist methodological holism will be used to break down and analyze tender areas and then relate them back to the whole. The best solutions to world issues begin with understanding the whole and therefore creating solutions that not only benefit the troubled area but also the entire system in which the trouble resides.

The main issue facing the fossil fuel industry is the impending fall in world demand. As previously stated, it is simply unrealistic to think that this industry will continue to prosper because of the growing support for renewables and cost-reducing innovation in their field. From this issue, two sub-issues can be derived: the need to find revenue lost from royalties and the displacement of workers who currently rely on the fossil fuel industry. A potential answer to this could be hydrogen fuel. According to David Layzell and Jessica Lof via the Edmonton Journal, "[t]here is no region in North America that is better positioned than Alberta for cost-effective, large-scale production and distribution of zero-emission hydrogen fuel" (Layzell & Lof, 2019). Existing technologies for hydrogen fuel production could be easily adapted to produce hydrogen fuel from fossil fuels without emitting carbon. This process would not only create a climate-friendly industry to replace fossil fuels, but it could also be more rewarding than the fossil fuel industry. Hydrogen fuel could produce up to ten times more economic activity than traditional fossil fuels. A large opportunity for this type of fuel lays in large diesel engines such as buses and long-haul trucks, as electricity may not be their best option given the need for

regular charges (Layzell & Lof, 2019). In terms of passenger cars, the Japanese car company Toyota has developed a model powered by hydrogen fuel extracted from animal manure (McAleer, 2019). Though this product is being marketed in Ireland, Alberta's livestock industry could provide similar opportunities. However, it may be best to start using hydrogen fuel for transit and transport trucking, given the costs associated with converting conventional engines to hydrogen fuel (Sutton, 2010). Though Alberta's largest store of potential hydrogen fuel is in its fossil fuels, a more experimental technology may be in reach if funding allows for further study and implementation: extraction of hydrogen fuel from human waste. Spanish researchers recently tested the potential for hydrogen fuel extraction from human waste using purple phototrophic bacteria. These photosynthetic bacteria take a previously useless resource, sewage, and with the help of other compounds in bio-electrochemical conditions create fuel (Vasiliadou et al., 2018). Although initially suggested for use to power wastewater treatment plants (Patel, 2018), this method could be used in conjunction with distributed solar PV and wind to fuel the power grid. This would put Alberta's unused manure and human waste to good use. With a grid powered by renewables, the floor would be open for increasing installment of charging stations, allowing Albertans greater access to electricity for electric cars.

An underlying theme to this plan is that it would require plenty of skilled trades workers for implementation and upkeep. A survey by energy worker not for profit Iron & Earth showed that over half of those in the oil and gas industry feel that their skills could be transferred to renewables with additional training, and 15% said they are already capable of making the switch. This additional training could be as simple as a ten-day course. Making the shift to renewable energy would mean a more stable future for these workers, unlike the days of boom-and-bust of

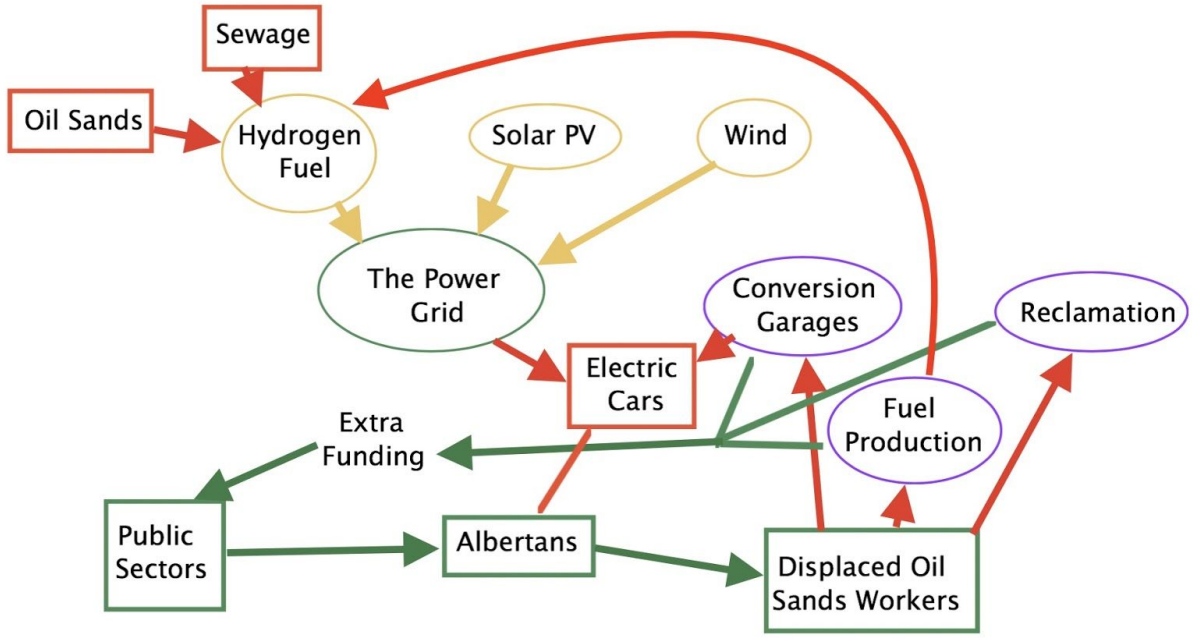
the fossil fuel industry that left many laid off for uncertain periods of time. Also, many renewable projects offer pay comparable to that of the fossil fuel industry (Dembicki, 2019). An additional niche for these displaced workers is reclamation: a potential quarter-trillion-dollar opportunity. Instead of seeing reclamation as a liability, it could be turned into an economic engine providing jobs to many already employed in the energy sector. By claiming Alberta's fair share of remediation from the companies that have ravaged its natural systems, the province could put many back to work dismantling old and unused sites (Boychuck & Lewis, 2018). By using Alberta's capital, both natural and human, a shift from fossil fuels to renewable energy may be in reach. Current structures could be used to implement a plan that shifts workers and resources into stable, climate-friendly outlets.

An economy should prioritize its public: without workers to provide labour the human world would cease to exist. A balanced society exists because every niche is filled, every part of the system must be functioning to support the overall network. It is the public sector that educates and cares for citizens that keeps an integral part of the economy afloat: the supply of human capital. The UCP's budget greatly undervalues these sectors. Cuts to medical fields decrease the accessibility of these services, making it harder for workers to stay healthy enough to optimize their economic production. Decreasing funding to education reduces the quality and accessibility of it, making it harder for the population to attain the certifications required to enter the workforce. Contracting services for those with disabilities and low-income citizens reduces their ability to function in society, and lifting these groups with support and funding could help them become productive assets in the economy. Every low-income citizen that is unable to obtain a decent education because of their situation is a lost opportunity for the economy, a waste

of human capital. Therefore, providing as much support as possible to the public sector will increase the overall productivity of an economy by increasing the productivity of each worker.

Given the previously outlined situation and the potential solutions posed, a suggestion for a restructured system arises. Using fossil fuel systems already in place, the transition to renewable energy could be navigated using workers from the industry. Hydrogen fuel technology could be implemented to power public transit and transport trucks, as well as provide electricity for the power grid combined with distributed solar PV and wind. While fuelling Alberta's power grid, the electricity provided by renewables could also power charging stations for electric cars. Publicly-owned garages could be created to convert existing cars to electric. Displaced workers from the fossil fuel sector not already employed in renewables or conversion garages could be put to work reclaiming Alberta's natural systems after fossil fuel extraction sites, pipelines, and other facilities are no longer needed. With the province providing its own electricity and no longer needing to rely on global fossil fuel demand, the energy sector would be more stable and provide greater job security for its workers. Communal involvement in the economy through public initiatives instead of private ownership would reduce labour alienation and reconnect workers with the communities for which they provide energy. By increasing government ownership of industries, both public and currently private, the prosperity of the general Albertan public will be made a priority over profits. Given its opportunistic position for hydrogen fuel production and large number of skilled trades workers, redesigning Alberta's economy could make the province a leader in renewable energy. This would change Alberta's reputation as a "province with a struggling economy, a declining and outdated industry, [and] a lack of innovation," as said by Adam Legge, president of the recently formed Business Council of

Alberta (The Canadian Press, 2019). Powering the province with climate-friendly methods and reinvesting the economic gains in public sectors could create a new reputation for the province as one that prioritizes the Earth and supports its people. The province could be an example for other governments as the world shifts towards greener, more inclusive economies.



A diagram of the plan outlined above to redesign the Albertan economy

Conclusion

In summary, falling global demand for fossil fuels will pose challenges to the Albertan economy without early intervention. To ensure public prosperity, public sectors must be strengthened. Policies that further investment in the fossil fuel industry are counterintuitive to protecting the province from the rise of renewable energy and the associated loss of employment in the fossil fuel sector. It would be in the best interest of all Albertans to diversify the economy

away from fossil fuels and prepare for climate change. Bolstering public sector services will increase the economic productivity of Alberta's labour force and increase class equality, helping to reduce the gap between the richest and poorest. One's position in class hierarchy affects not only the opportunities they encounter but also their worldview and self-image (DeAngelis, 2015). Therefore, increasing class equality could increase overall empathy and awareness of others. This shift in worldviews could increase the tendency towards more socially beneficial policies and empathy towards those in the world's lowest classes. Increasing awareness of the pain felt in the world's lowest-income groups could increase support for climate change mitigation as understanding the potential harm to those unable to shield themselves from the adverse effects of climate change would highlight the privilege of those who can. Overall, tackling climate change with every possible solution and closing the gap between classes would have incredibly beneficial effects on all members of the human race. The survival of Alberta's economy through the next few decades will be dependent on its ability to adapt to falling world demand for fossil fuels. If Alberta was to focus on the transition from unsustainable energy production to renewable technology while strengthening public sectors it could become an example for the rest of the country going into the future.

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