

Navigating COVID-19 & The Future of Energy

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WOMEN IN RENEWABLE ENERGY (WiRE)

WiRE's mission is to advance the role and recognition of women working in the energy sector. Inclusive of all renewable energy and clean technologies, our programming includes capacity-building field trips, networking meet-ups, an awards recognition program, student bursaries, speed mentoring and more!

WiRE was started in Toronto in 2013, and has since launched chapters across Canada in every province and the Northwest Territories. The organization has also launched chapters internationally in Turkey, Jordan, Azerbaijan, and the UAE. WiRE continues to work on replicating its organizational model on the international scale with the support of Canadian Embassies and Consulates.

WiRE forges partnerships with government agencies and a spectrum of renewable energy industry associations, other related networking groups for professional women from across the energy sector, and academic providers. WiRE appreciates the financial and industry support it receives from its sponsors, which helps to provide programming at low or no cost.

ACKNOWLEDGEMENTS

WiRE would like to thank the leaders in the Canadian energy sector that have participated in this report, and without whom this endeavor would not be possible. All comments, participants, and organizations have been anonymized for privacy and confidentiality purposes.

WiRE conducted over 30 interviews with leaders from various energy organizations across the country and the supply chain. With this report, we aim to provide an account of experiences, comments, and lessons learned by our leaders throughout the COVID-19 pandemic, and create an avenue for change and collaboration within the industry.





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“Energy is about the way we live, work, and play... there’s nothing we can do without it.”

- CANADIAN ENERGY LEADER

UNCHARTED TERRITORY

The COVID-19 pandemic has had a profound effect on every business in every sector, and indeed every aspect of society. This includes every company connected to WiRE – Women in Renewable Energy. With the global economy ground nearly to a standstill, office towers empty, and multiple daily video conferences as the new normal, WiRE interviewed a wide range of leaders across the energy sector’s supply chain to discuss how they are handling the crisis. We wanted to learn how they have responded to the COVID-19 challenge, how it has changed their businesses, and where they see the energy marketplace heading next as the first wave of the pandemic begins to recede and companies and their leaders attempt to navigate a radically altered economic landscape.

Unsurprisingly, our interview results indicated that no business has been untouched by the pandemic, and that most of us are facing the same kinds of challenges, regardless of which niche we might occupy in the energy industry. We were also excited to find that despite the ferocious toll the economic lockdown has taken on most bottom lines, smart companies have begun to uncover opportunities for positive change and lasting innovation in these trying times.

For clarity, we have arranged the results in a rough chronology. We begin with how our leaders experienced the impact of the pandemic itself. Then we discuss how they have responded, what has changed and what has not, new approaches that are working well and new ways of doing business in uncharted terrain. Finally, we summarize the challenges and opportunities that our leaders see in the twists and turns to come as the world continues to struggle through the worst public health crisis in a century.

Sizing up COVID-19

WHAT WAS THE PANDEMIC'S IMPACT ON THE ENERGY INDUSTRY AND BUSINESS IN GENERAL?

THE ENERGY INDUSTRY IS IN A SERIOUS SLUMP.

For most of us in Canada, there has never been a sudden jolt to the status quo quite like the outbreak of the COVID-19 pandemic. In mere days, offices emptied, retail operations and business meetings ground to a halt, conferences were cancelled, and projects were put on hold. The energy industry has been as hard hit as any by the shockwaves of the pandemic. The full impact will not be known for months yet, but the International Energy Agency (IEA) is already estimating that global energy demand will be down by as much as six percent for 2020, a decline that has not been seen for the past 70 years¹ – as if all of the energy needs of India, the world's third-largest energy consumer, vanished from the equation overnight. This sudden shock had repercussions for every aspect of the energy industry.

The good news is our energy systems have proven resilient enough to buzz along steadily despite the enormous disruptions to the daily lives of operators and consumers alike. As one industry leader put it, “The lights are on, we still get our gas. But I don't think people fully appreciate how at risk some of that stuff might have been.” Energy security in Canada remains very strong.

This is despite significant shifts on the demand side. Residential demand for electricity, in particular, has shot up as more and more people work from home, while commercial demand is dropping.

Overall energy demand in Canada has declined along with the rest of the world, with demand for fossil fuels – oil in particular – seeing particularly steep declines. Our daily need for not just gasoline but jet fuel and diesel for transport has diminished significantly and will likely remain so for some time. At one point early in the pandemic's first wave, as anyone following the news noticed, oil was trading briefly at negative prices. Paying people to take the world's most important commodity was certainly a clear sign that the status quo had been turned on its head.

The collapse in demand for oil has had repercussions all the way up the supply chain to the source – which has amplified the pandemic's challenges for Canada's resource-driven economy, especially in western Canada. Oil refineries in North America have scaled back their output by as much as 30 percent in response to shrinking demand, meaning that suppliers such as Alberta's oil sands need to scale back their operations as well, “shutting in” some of their production, to use the industry term. In addition to the immediate impact of this supply shock, oil producers lose money on shut-in fields and can find it difficult to return to previous levels of production and efficiency once the crisis passes.

1. IEA (2020), Global Energy Review 2020, IEA, Paris <https://www.iea.org/reports/global-energy-review-2020>

“We’ve had to pivot very quickly.”

The global decline in oil demand has led to significant layoffs in North America’s oil and gas industry. This represents a setback to energy security in addition to the immediate economic impact. Canada and the United States had increased their own production significantly in recent years, but disruptions to supply chains could lead to greater reliance on imports and potentially intensify conflicts between the push to reduce fossil fuel use and energy security goals.

THE WORKING DAY AND THE WORKPLACE CHANGED OVERNIGHT.

“We’ve had to pivot very quickly,” one of the leaders told us. That is a massive understatement. Virtually every aspect of the usual business day was reordered in a hurry when the pandemic triggered lockdowns across North America in mid-March.

The most dramatic shift was the indefinite closure of most offices. Working from home became the norm overnight. Though some organizations already had part of their workforce working from home, many others had to transition staff quickly. That meant Information Technology (IT) departments working overtime to ensure employees had the right tools to work from home. In some cases, it has even meant sourcing office chairs and other office gear for their employees’ makeshift home offices. Happily, the interviewed leaders have mainly reported that the rapid shift to working from home has gone smoothly.

In some cases, for example work crews and site workers, there are no remote work options. This obliged some organizations to make rapid adjustments to ensure workplace safety and a secure supply of Personal Protective Equipment (PPE), as well as to reduce the number of workers on site to allow for social distancing and other new health and safety protocols.

CONTINUITY IS A MAJOR CHALLENGE IN A LOCKDOWN.

Energy is among the most vital daily necessities and all mission critical infrastructure depends on it, so many companies in the energy sector were designated as essential service providers. For these companies, the pandemic required them to move quickly to ensure business continuity. This meant making sure employees had everything they needed to keep themselves and others safe in the midst of a rapidly evolving crisis, so that those employees could keep factories and other vital infrastructure humming.

Enhanced safety protocols have been crucial to this continuity effort. Essential service providers brought in employee temperature checks, PPE, new entry and exit protocols to minimize contact and practice social distancing, and more widely distributed sanitizer. Work crews had to be reduced in size – one organization, for example, shrunk its crews from five to four, while 100 workers were isolated at home and serving as back-up crew for the workers in the



field. At renewable energy generation sites, vehicles were used to provide food to crews on-site, while backup plans were made for workers to sequester themselves from their families in local hotels. Workers sometimes needed to travel to communities other than their own. This required them to adapt to local PPE and safety protocols to avoid further risk of spreading the virus, especially in remote, vulnerable northern communities.

Even for companies not operating essential services, the pandemic has been an enormous

challenge to business continuity. Conferences, sales meetings, training events and meetings with policymakers were all put on hold. Clients and customers, many of whom have had their bottom lines hammered by the lockdown, have required flexible and delayed payment plans. Project timelines have been extended and supply chains slowed. With air travel ground to a halt, some ongoing projects have required long-distance driving. Keeping businesses operating even at the slowed pace of the pandemic has required fast, nimble adaptation throughout the energy sector.

Living with COVID-19

HOW HAS THE ENERGY SECTOR ADAPTED TO THE PANDEMIC THREE MONTHS ON?

BUSINESS ISN'T AT ALL AS USUAL, BUT IT'S STILL MANAGEABLE.

The upheavals of the pandemic and lockdown have obviously changed many aspects of business; however, the majority of interviewed leaders report that productivity has not been significantly altered. There are certainly some organizations moving slower. “We’re probably losing about an hour a day due to COVID,” one leader reported, estimating the total impact on productivity caused by factors, ranging from additional paperwork to adopting health and safety measures and managing social distancing.

Other leaders see business moving steadily along and even improving in some areas. With everything from business lunches and dinners to quick coffees and after work drinks off the agenda, some leaders and their organizations are finding more time to focus on core business activities. “Before, when I was busy,” one leader said, “a good chunk of the day was meeting someone in government for coffee or lunch...but now I can manage my time better and it doesn't cut into revenue or how we bill our clients.”

For senior management in the energy sector, some of the most difficult challenges of the lockdown have come from having to make hard

decisions about cutting budgets and shrinking their workforce. Smaller firms in particular have found themselves obliged to lay off employees, though some were optimistic that they would eventually be able to hire them back post-pandemic. Other leaders, however, were even more worried about the need for layoffs as the long-term impacts of the stalled economy kick in.

One major concern shared by many organizations is about losing talented and highly skilled employees. If the pandemic continues to inflict economic woes, how long can cash-strapped companies hang on to even some of their very best people? “When you have a lot of layoffs,” one leader said, “you lose a lot of technical expertise that you won't necessarily get back.” This is a particular concern for the oil and gas industry, where layoffs have been among the deepest, and where a skilled worker can take a full decade to train. What if that talent isn't available when the industry returns to its regular levels of operation?

THE “NEW NORMAL” OF THE WORKING DAY HAS MEANT SOME BIG ADJUSTMENTS.

The leaders report that many of the biggest changes have come from managing staff who are primarily working from home. Though the transition to home-based work for many of their organizations has been fairly smooth, with some even seeing advantages in terms of productivity and employee satisfaction with the new work-life balance, the changes come with unique and sometimes unforeseen challenges.

Foremost among the effective measures taken has been to invest in the best IT tools to ensure smooth, effective workflow and communication. Online communications tools were already familiar to many organizations because they work with global clients and partners, but ensuring home offices have the connectivity and tools for the job has been crucial to keeping businesses operating smoothly. Not every employee's home had the computer technology and Wi-Fi connectivity in place for pandemic levels of networking. Some employees have also needed financial help to get home offices set up. "It's hard," one leader said, "because everybody is in a different circumstance and as an employer you don't want to take on the obligation of furnishing someone's home. But there's some duty of care we can take on to make sure people have a space that they can work productively in."

THE WORK-LIFE BALANCE IS CRUCIAL TO LOCKDOWN SUCCESS.

One of the trickiest aspects of managing a virtual workforce is striking the right work-life balance, an equation that can be radically different from one employee to another. Some employees have been thriving in a home work environment with its less formal approach and looser work schedules. As one academic expert who contributed to this report noted, productivity is only one piece of the puzzle. Workers are missing out on the daily exercise and casual social aspects of their jobs, and such a limited social environment for

TRANSITIONING TO WORKING FROM HOME: TIPS

- Provide clear direction to employees
- Assemble last-day checklists for final day at the office to prepare for remote work
- Provide backup remote working tools on site for rapid transition
- Provide financial aid for home office set-up

work isn't sustainable in the long term. There is ultimately no digital substitute for in-person, face-to-face communication.

Some organizations have also reported frictions with unions and unionized energy sector employees. Some unionized workers have had to continue with field work and wonder why they are left out of work-from-home opportunities, and these situations have required careful management. "We need to work closely with union partners to strike the balance of completing critical work and keeping those workers safe," said one leader. "I don't consider utility workers that different from hospital workers. We aren't saving lives, but people in hospitals can't save lives and people can't stay home if we don't provide electricity."

“For my colleagues and I who are working from home we never feel like we are doing any of those jobs 100 percent.”

The biggest challenge of working from home has likely been the extra burden it places disproportionately on working women, who are more often being asked to shoulder the increased housework and parenting chores of pandemic life while continuing with their full-time jobs. In fact, women report doing “three times as much unpaid care and domestic work as men,” and this number as only increased during the COVID-19 pandemic.²

Globally, as women take on more care work, their jobs are nearly two times more susceptible to cuts and lay-offs than men's positions.³ Many of the leaders interviewed noted that female employees have been reporting difficulty in keeping up with their workload while also serving as child-care providers and part-time teachers on the home front. “For my colleagues and I who are working from home,” one female leader said, “we never feel like we are doing any of those jobs 100 percent.”

Women have been affected disproportionately by COVID-19. According to a United Nations Policy Brief examining the impact of the pandemic on women, existing disparities between men and women regarding income, job security, access to social protections, and participation in the informal sector have made it far more difficult for women to absorb economic shocks.

THERE IS MUCH MORE TO MANAGING THE PANDEMIC CRISIS THAN MAINTAINING PRODUCTIVITY.

Many of the interviewed leaders reported that they are seeing a need to put extra effort into managing their own and their staff's stress, mental health and coping capacity in this “new normal” work environment.

Layoffs, whether temporary or permanent, have a significant impact on workforce morale, not to mention the extra workload they can entail for remaining employees. The atmosphere of hard economic times and diminished job security is a

2. “The Impact of COVID-19 on Women,” UN Women (United Nations Entity for Gender Equality and the Empowerment of Women (UN Women), April 9, 2020, https://www.un.org/sites/un2.un.org/files/policy_brief_on_covid_impact_on_women_9_april_2020.pdf, 6.

3. Anu Madgavkar et al., “COVID-19 and Gender Equality: Countering the Regressive Effects,” McKinsey & Company (McKinsey & Company, July 17, 2020), <https://www.mckinsey.com/featured-insights/future-of-work/covid-19-and-gender-equality-countering-the-regressive-effects>.

“You can never over-communicate at a time like this.”

source of constant anxiety. Daily work routines have been radically altered and schedules subject to enormous unpredictable change. All the valuable informal opportunities for social interaction that the workplace once provided, the coffee break or hallway chat that might ease some stress or settle an emerging problem, are now gone.

Even the looser timelines of working from home can be a source of unexpected stress – one leader reported having to keep his weekend work offline in order to avoid making employees feel obligated to reply to emails right away when they should be relaxing.

It all amounts to a recipe for potential burnout – a concern many of the interviewed leaders said they are keeping an especially close eye on. “I do worry about burnout,” one leader said. “It feels like one long day, back to back with every other day. So we have been focused on active communication with employees, recording videos for employees, and providing an interactive site with tips.”

Open, frequent communication is the top well-being strategy recommended by virtually all the leaders interviewed. The specific approaches include sharing tips on staying healthy in quarantine, reassuring employees that it’s okay to not be okay in these difficult times, and repeatedly urging employees to provide feedback on how to manage the situation better. In pursuit of continuous improvement, some organizations have introduced an internal audit system to gather “lessons learned” from staff, and another has

tasked its Human Resources (HR) department with surveying employees on their well-being. Organizations have also used regular informal mental health check-ins, digital all-staff town halls, virtual beer and pizza nights, coffee chats about topics not immediately work-related, even video-conferenced yoga.

“You can never over-communicate at a time like this,” one leader said. Another explained, “As a CEO of a company, I have to think how can I help people see through this ... I don’t have all the answers, but it’s up to me to make sure that we will have the answers and what we have to do to get there. It’s mentally exhausting. I do my own self-care at home. Looking after your mental health is important. And this leads the way for you to coach others as well.”

TO MANAGE THIS “NEW NORMAL,” LEADERS NEED TO BE OPEN TO RE-EVALUATION AND RE-FOCUSING.

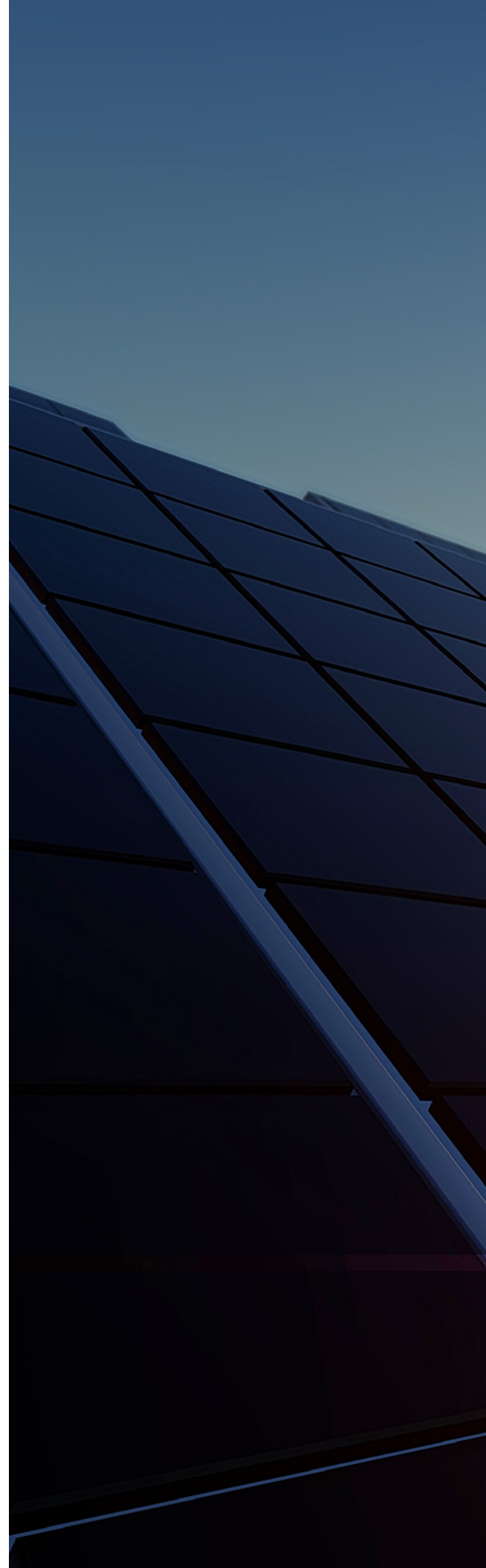
For each leader and organization, the nature of these adjustments is different, but virtually all report reconsidering long-established practices and long-held assumptions in the midst of the pandemic’s upheaval.


Some report having learned from the fast-evolving pandemic crisis to be much more ready to change their minds and change direction in the light of new evidence and to respond to the best new information, even if that requires admitting to past mistakes and leaving them behind.

Decisive leadership – the ability to make hard decisions quickly and stick to them even in the face of great uncertainty and employee pushback – is another valuable pandemic leadership skill. Others have found that their technical expertise has taken more of a background role, while listening skills, empathy and compassion have become much more valuable as everyday leadership tools. “I like to think I’m a compassionate leader,” one said, “but this has changed me.” Another said, “It’s really reinforced the responsibility for looking out for the well-being of our team.”

For some leaders, the new normal business landscape of the pandemic has even provided a welcome opportunity to re-focus on core values and re-establish top priorities. The “treadmill” of the old routine, one said, didn’t allow time “to pause and reflect.” Some leaders have felt a renewed sense of the responsibility for their work and their workers; another reports that the pandemic has instilled a new humility “about the fragility of business.” Many have been most humbled by the great displays of kindness they have seen in their organizations and beyond, as all of civilization works with unprecedented coordination to navigate the crisis. Others have found the pandemic has reminded them of the value of a healthy planet and the need for the energy industry to operate and grow “in a clean and responsible and sustainable way.”

One thing is certain: No business and no leader who has managed the work of surviving these past few months will emerge unchanged.





**“I like to think I’m
a compassionate
leader, but this has
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Looking to a Post-Pandemic Horizon

HOW DO ENERGY SECTOR LEADERS VIEW THE WAY FORWARD?

THE PANDEMIC IS TEACHING THE ENERGY SECTOR SOME HARD BUSINESS LESSONS.

For most organizations coping with this crisis, the toughest financial challenges are the same. With demand for energy down across the board and customers cash-strapped, revenues are in decline throughout the sector and threaten to stay that way for the foreseeable future. Some firms are being particularly hard hit by customers unable to pay their bills, others by cash flow-generating projects put on hold or cancelled entirely. The time required to secure cash reserves has stretched out considerably, and the ability to attract new customers is crippled for many companies by the inability to meet in person, while the cost of maintaining idle facilities and unused offices remains. “A lot of utilities are seeing a real decrease in revenues,” one leader explained. “Everyone’s working at home, manufacturing is at a standstill, so there will be long-term ramifications from a financial perspective.” Several others indicated the pandemic has underscored the value of keeping more cash on hand to better manage long liquidity crises.

For many of the leaders, the pandemic has revealed concerns about the resilience of their supply chains and identified shortcomings that won’t be easy to fix quickly post-COVID. One

leader stated, “It will take suppliers months, if not years, to ramp up to where they were before.”

Relying on international suppliers has proven particularly troublesome. Vital fuels and crucial components have ended up on the wrong side of borders locked down due to the pandemic, showing just how much risk there is in these supply chains during a major crisis. In response, some leaders say they will be revamping their supply chains so they can continue to maintain critical grid infrastructure amid geopolitical tensions and border closures, both by diversifying their suppliers geographically and by moving closer to their customers. Others talked about the need to bolster local supply chains. Energy security has moved up the agenda for some leaders. “We tend to discount or take for granted our energy security,” one leader said. “We feel like we are just entitled to it. More attention needs to be paid to energy and how we get it. Supply chain redundancy is really important.”

The supply chain woes and cash flow crises of the lockdown have emphasized the value of diversification across the board. One leader said that in order to be economically resilient, you can’t have all of your eggs in one basket – one service, one sponsor, one supplier – because any one actor could vanish in a crisis. Leaders also suggested looking into diversifying their business model. For example, one leader stated that rather than renting a large physical space that’s permanent, the business is looking to switch to a more pop-up, mobile environment that will allow

“More attention needs to be paid to energy and how we get it.”

them to avoid paying high rent and service further markets more effectively.

Another tough lesson taught by the pandemic is that emergency and risk management plans are even more important than previously realized. Nearly all the leaders interviewed were impressed with how quickly their organizations were able to respond to the pandemic. Some had pandemic plans that were enacted seamlessly, while others had less robust plans and had not thought through as many possible scenarios. Regardless, the general sentiment was that they had done the best they could, given the rapidly changing information they had and the circumstances they were in. Creating, updating and practicing the long-term operation of emergency and business continuity plans is a higher priority than ever post-COVID.

“There are so many things we could’ve been prepared for,” one leader said, “but sometimes it takes the event to happen to learn how to plan better.” Leaders indicated they wished they had responded sooner and more thoroughly to the arrival of the pandemic – for example, requiring employees to isolate after travelling and acquiring PPE early on. “A lot of companies were afraid to take a leadership role,” one leader said. “There were enough signs to start the leg work we did in March two months earlier.” Other leaders noted they anticipate similar crises await in a future more unpredictable than ever, and they will update their emergency plans accordingly.

The operational worries of the pandemic extend beyond current operations. One leader said her organization had been in an aggressive growth mode when the pandemic hit, with multiple acquisitions planned for the next three years. All those plans are now on hold, with hopes that they will be put back on track if and when the economy revs back to full speed.

THE PANDEMIC IS A BIG SHAKE-UP FOR THE WORKFORCE AS WELL AS THE MARKETPLACE.

To properly prepare for the next phase of the pandemic and the gradual return to normal levels of economic activity, the leaders interviewed agree that managing people and organizational culture will be a high priority.

Retaining talent is high on that priority list. Work might be slow at present; however, some leaders expect to see a sharp increase in new projects as building out new infrastructure becomes a central piece of the post-pandemic economic recovery. It is thus important in the face of current job losses to retain the best talent, particularly employees who represent long-term investments for the organization, and to ensure that career aspirations remain viable despite the upheaval of the pandemic.

For the foreseeable future, flexibility will play a critical role in workforce management. One leader has plans to use rotational programs to retain younger talent. Hiring new employees with niche

skill sets or contracting out employees from one department to another as projects gear back up are other possibilities. Some leaders also worried that their workforces might see increased losses due to retirement, and hiring may be complicated by the reluctance of some workers, including co-op students and interns, to enter the workforce in the midst of the pandemic. Labour shortages are a real concern, especially if the recovery plan triggers an infrastructure construction boom. Other leaders indicated that some of their employees are keen to continue working from home to be closer to family and avoid time-consuming commutes. Modified and variable work-from-home plans will likely continue to be a critical part of the post-pandemic working world.

A different set of challenges awaits employees beginning to plan their slow return to the office. Safety protocols will be critical not only at offices and work sites but in the communities at every step along the worker's commute. Maintaining proper social distancing, public health protocols and cleanliness will have to be carefully managed from home to transit to workplace. Getting the reopening right will require organizations to update work protocols, provide safety training and PPE, leverage digital solutions where possible to minimize contact, and work closely with unions – all without compromising productivity. New office features such as temperature checks and multiple daily disinfections of shared spaces will be part of the new normal post-COVID.

The pandemic's obligatory work-from-home phase may end, but many leaders expect it to alter the nature of business travel in the long term. Now that the business world has habituated the use of video conferencing and other digital meeting tools, meetings that used to routinely involve air travel might just as easily be conducted virtually.

The needs of the energy business are likely to be significantly altered post-pandemic, and many interviewed leaders suggested they would be looking to retrain current employees to adapt their skill sets to the new normal. Organizations will need employees who are adept with digital communications tools, flexible and empathetic with customers, and up to speed on the logic and architecture of next-generation energy systems, particularly renewables and more resilient and decentralized grids.

The pandemic has also highlighted the importance of an agile work culture with strong values and an open-minded attitude toward change. Several leaders report that the time they put into creating cultures of “genuine caring” and close engagement paid off when the pandemic obliged them to work together fast to navigate the crisis. Another says the pandemic has created a “massive opportunity” for her organization to learn how to implement change management processes on the fly.

For some organizations, that rapid adjustment process provided an excellent test of their

“I feel like I’m being asked to do a lot more. My workload is ramping up.”

adaptability. Setting up work-from-home systems for hundreds of workers in just a few days proved that effective decision-making and strong action doesn’t need weeks of discussion and multiple signatures. “This pandemic forced us to make decisions that we used to kick around the table and never really got through the goal posts,” one leader said. “Now we can actually test some of this out.”

The workforce and workplace shake-ups of the pandemic have also shined a spotlight on the progress made by diversity and inclusion efforts in the energy sector. While some leaders see this as an opportunity to redesign organizational practices and reconfigure organizational culture to be inclusive of underserved groups (e.g. women, people of color, LGBTQ+, minorities, Indigenous peoples) and their needs, it has also demonstrated that there is still a lot of work to be done on industry diversity.

One interviewee reported that despite her expertise, her voice continues to be ignored. “I feel like I’m being asked to do a lot more. My workload is ramping up. At the same time my frustration is that I think I have really good ideas. I had an interview recently, my comments took about half an hour of my time and they were for a national newspaper – and my comments were never published in the newspaper. Gendered responses, gendered discrimination, lack of awareness that we’re gendering things is a really big frustration in general. And in this moment, I

know I have tons of great ideas, why won’t you just listen? And I know that it is gender that makes it hard to pay attention.”

As a number of the leaders interviewed, especially female leaders, noted, the pandemic has intensified many of the systemic disadvantages faced by women and minority groups. These groups are more likely to be living in poverty and are more likely to work in high-risk front-line jobs. As previously noted, women have also been much more frequently required to take on extra duties at home during this crisis, and multiple female leaders noted that domestic violence rates have gone up. In fact, federal consultations have shown a “20 to 30 percent increase in rates of gender-based violence and domestic violence in some regions of the country.”⁴ With respect to the Indigenous population, several leaders noted that remote Indigenous communities faced greater challenges during the pandemic due to a lack of resources and adequate health care.

As organizations return to regular operations, some leaders, again particularly female ones, emphasized the need to renew efforts on diversity and inclusion. “I think it’s something we need to be very cognizant of, to really ensure that increasing inclusion and equity is a focus for your company and part of your business plan and it continues to be a conversation between senior management, because leaders set the tone for the organization and other employees through the trickle-down effect.”

4. Patel, Raisa. “Minister Says COVID-19 Is Empowering Domestic Violence Abusers as Rates Rise in Parts of Canada | CBC News,” CBC News, CBC/Radio Canada, April 27, 2020, <https://www.cbc.ca/news/politics/domestic-violence-rates-rising-due-to-covid19-1.5545851>.

RESULTS OF LEADER INTERVIEW QUESTION ON DIVERSITY AND INCLUSION:

Do you believe certain groups of people (e.g. women, Indigenous, people of color, minorities, LGBTQ+) are at an advantage or disadvantage during this time?

	MEN	WOMEN	TOTAL
Think they are disadvantaged	2	13	15
Think they are advantaged	0	2	2
Believe there is no impact	7	1	8
Don't know	3	0	3
Total	12	16	28

	MEN	WOMEN	TOTAL
Think they are disadvantaged	17%	81%	53.5%
Think they are advantaged	0%	13%	7%
Believe there is no impact	58%	6%	28.5%
Don't know	25%	0%	11%

*Two women were removed from the total count because they were not asked this question

This is especially important in the energy sector, which tends not to be very diverse. And the value of emphasizing diversity, which brings new perspectives and new ways of thinking through problems to an organization, will only gain in value in the difficult and unfamiliar terrain of the post-pandemic economy. Given the enormous disruptions already underway, there is an opportunity as the economy restarts to create more space for women and minority groups and, as one leader put it, “to transform into what we have been hoping for and advocating for.”

“I think it’s something we need to be very cognizant of, to really ensure that increasing inclusion and equity is a focus for your company.”

THE POST-PANDEMIC ENERGY BUSINESS IS A CHALLENGING AND UNCERTAIN NEW PLAYING FIELD.

Even as the energy industry leaders attempt to manage the cash flow and business continuity woes of the current crisis, they see a whole new range of challenges down the road. The concerns begin with cost-cutting measures necessary for the present that might make it difficult to ramp back up and operate at regular speed. Future forecasts and long-term plans have always had a lot of variables and risk, but with the situation changing almost daily, those future-planning decisions have grown even more difficult. Some organizations are planning for two years of the current pace of business, others doing scenario planning with “good, bad and ugly” options. “We have to balance managing the present and managing the future,” one leader said. “I think there will be negative consequences for not thinking long-term. There are cost-cutting measures taking place which are necessary, but are we looking at the right thing?”

Many leaders are confident that the energy sector will have a critical role in recovery plans. It won't just be bringing suspended projects back into execution mode, but about finding new opportunities that can create jobs and generate revenue quickly in order to help the whole economy get humming again. Still, Canada's economy will be in a fragile state for some time, and capital and even some traditional avenues of government funding may be hard to come by.

Everyone expects governments to invest heavily in the recovery, but there are worries among the leaders interviewed about where that money will go. Will the ailing oil and gas sector attract the most support, for example, and what might that mean for the fast-growing cleantech economy that was just beginning to hit its stride pre-pandemic? If diversification and resilience are our new goals, then shouldn't that include looking beyond the status quo in the energy sector?

Amid the anxiety, there are reasons to be optimistic about the sector's role in the recovery. With better foresight and planning and predictive asset management, energy companies can generate new economic activity even as they better prepare themselves for the next wave of challenges. Some leaders are concerned about how to manage energy assets that have long lifespans in a time of such uncertainty. Others see both opportunity and danger in the infrastructure spending that will likely be included in government recovery plans.

“Some places will see it as opportunistic to replace aging assets with new assets,” one leader explained. “There's this concept called helicopter money: something happens, and governments just want to spend money. We seem to be on the cusp of one of those periods right now. It's transformative from an energy standpoint because whatever decisions are made, they'll have a big impact on what kind of energy we need, and what kind of energy we're going to offer to the marketplace. So we are at a very interesting

“...it’s a once-in-a-generation opportunity to accelerate the transition to a low-carbon economy.”

crossroads right now, and the decisions that are made in the next six to twelve months are going to be very transformative.”

One area where the leaders see an enormous opportunity is in boosting grid connectivity east-west across Canada. Better integrated ties between grids nationwide would build a powerful foundation for clean energy. Leaders are hoping to see greater collaboration as well throughout the energy sector – more sharing of resources, reducing costs and improving reliability, as well as helping to build a more coordinated approach to clean energy development. “We’ve become very fragmented and self-interested in this country,” one leader said. “Perhaps this is an opportunity to get back to a collaborative approach. This is the wakeup call to change that and be less polarized going forward.”

While the pandemic has certainly amplified barriers faced by certain groups, there is also an opportunity to reimagine the workplace so that it is more welcoming to women, minorities, members of the LGBTQ community, and indigenous peoples. As workplace policies are reviewed in light of COVID-19, and while the conversation surrounding Black Lives Matter is in the spotlight, there is an opportunity to incorporate the perspective of disadvantaged groups in policy revisions. Some female leaders have already indicated that they have experienced positive outcomes, as they have taken lead roles on COVID-19 crisis recovery planning teams: “during [the H1N1 pandemic], there were probably

no women sitting at this table ... This goes back to role modeling as well. It should be irrelevant whether it’s a man or woman [when considering] who is right for the role.”

THE BIGGEST POST-PANDEMIC OPPORTUNITY IS A GREEN RECOVERY.

“This is a time where we can make change,” one leader said. It’s a point echoed by many of the other interviewees, who talked about refocusing during the pandemic on core environmental values, about the way the crisis has already forced us to abandon many of bad habits and most entrenched ways of thinking about problems, even about the simple joy people have found in viewing the local skyline or the distant mountain landscape through the clearest air in generations. And with the energy sector poised to play a central role in the post-COVID recovery, many leaders say it’s a once-in-a-generation opportunity to accelerate the transition to a low-carbon economy.

However, one leader is worried that COVID-19 could actually hinder the progress that has already been made. “We have all these great innovators but we could lose the last ten years they invested in clean technology,” one leader said. “We can’t lose them because they’re going to become the big companies. Those are seedlings of the great crops – but if they die, [there are] going to be limited number of crops and we need big crops of innovators.”

For Canada's energy sector, the opportunity extends to a varied range of potential projects. For major hydro power producers like Quebec, Manitoba and British Columbia, exporting emissions-free electricity continues to be a major opportunity. On the prairies, decarbonizing oil and gas not only addresses a major emissions source but can create investment and job opportunities in a battered sector of the energy business. The pandemic has underscored the need to better serve remote and Indigenous communities, and developing distributed renewable energy projects is a powerful way to help address those inequities. Energy poverty is a real problem in Canada, but not one that has been well tracked, let alone addressed. The post-pandemic recovery could easily include better efforts on this front.

“This is the wakeup call to change that and be less polarized going forward.”

To continue to pursue climate goals including 2030 Paris Accord targets and the net zero goal by 2050, a green recovery could leverage renewable and clean-tech development already underway across Canada. The list of possible projects includes:

- Investment in grid flexibility, especially in distribution systems;
- Investment in transmission infrastructure;
- Investment in more resilient decentralized grids powered by renewable energy;
- Investment in deep energy retrofits;
- Developing district energy systems to reduce heat waste;
- Leveraging telecom infrastructure (already owned and operated by many utilities) to develop smart city initiatives;
- Expanding investment in electric vehicle networks, especially in cities, potentially focusing on delivery vehicles, which are in higher demand due to the pandemic lockdown;
- Leveraging big data and data analytics (both of which have expanded to meet pandemic public health needs) to digitize, automate and transition to predictive planning; and,
- Invest in low-carbon fuels such as hydrogen.

“I see this as a time of disruption, where the traditional thinking has to change.”

It is important to keep in mind that women have a significant role to play in ushering in a green recovery. More than 70 percent of frontline workers are women, and in order for them to enhance their community’s resiliency, they require clean and accessible energy.⁵ To ensure that these workers’ needs are met, there needs to be more women at the table in energy organizations. In order to achieve representation, “utilities, renewable energy companies and energy agencies will need to differentiate between women and men in targeting their support policies and practices for remote working and operations.”⁶

INNOVATION WILL BE HARD IN THE MIDST OF A PANDEMIC - BUT IT’S AS IMPORTANT AS EVER.

Many leaders concede that the energy sector does not have a great track record for innovation. Business models in the energy sector discourage innovation on the delivery side of the equation. And utilities in particular tend to be large and wary of risk and rapid change. Add in the uncertainties of the COVID era, which discourage investment in new ideas, and there is ample reason to expect innovation to take a back seat to simply staying viable.

For organizations already pursuing innovation before the pandemic, now is nonetheless the time to double down. The current business landscape is wide open to big changes and big ideas that have long been on the backburner.

With resources scarce and money tight, companies that can innovate to find better, more efficient, and cheaper ways to operate and to serve their customers will find a keen marketplace. “I see this as a time of disruption, where the traditional thinking has to change,” one leader said. “Existing industries have to look at themselves to see what they can do to make things more efficient.”

To spur innovation, the leaders offered a range of directions and strategies. Established firms could look to partner with startup companies. With the pace of work slowed by the pandemic, this could be a good time to test innovations internally from the shop floor up. One leader suggested moving into international markets, where some Canadian innovations in the clean energy sector that are well established at home have added value. There will be opportunities as well to test out new business models such as creating revenue for struggling small communities, for example, or working with governments as they invest in new infrastructure in their recovery plans. “You need certainty to invest in innovation because research is not cheap,” one leader said. “We need the private sector and the public sector to come together to prioritize those opportunities.”

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5. “Gender and Energy at Center Stage in COVID-19 Battle: Powering a More Gender-Equal Recovery,” ENERGIA, 2020, 2.

6. “Gender and Energy at Center Stage in COVID-19 Battle: Powering a More Gender-Equal Recovery,” 4.



“If there’s one thing I really hope comes out of this, it is a greater sense of shared resilience.”

Emerging technologies, especially those that can solve problems created by the unique features of the COVID-19 economy, offer an enticing way to pursue innovation while diversifying revenue streams. Possibilities include:

- New technologies to make the workplace safer (e.g. remote asset controls, remote field inspection applications);
- Work-from-home digitalization technologies, including networking platforms and content;
- New self-serve options for customers to access products and services remotely; and,
- Data protection and other cyber-security measures.

UNCERTAINTY WILL BE THE NATURE OF BUSINESS IN THE POST-PANDEMIC ERA.

The leaders were left with many of their own questions. At the very top of the list was a simple question being asked everywhere: When will there be a vaccine? Others wondered whether the pandemic crisis will be seen as a warning to take action sooner on climate change, how quickly electrification will expand, or what will happen to oil and gas in this new economic landscape.

One recurring theme was a new sort of awareness emerging from the pandemic. The fragility of business – every business – has never been clearer. The need to work together has never been stronger. “If there’s one thing I really hope comes out of this,” one leader said, “it is a greater sense of shared resilience.”

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