2019

OIL & GAS SURVEY OUTLOOK REPORT

Daily Oil Bulletin



INTRODUCTION

Pessimism reigns amongst Canadian oil and gas producers, according to 2019 Daily Oil Bulletin Industry Survey

The Canadian oil and gas industry is in crisis, with volatile prices, regulatory issues, and market access and diversification concerns driving down capital investment, according to the third annual Daily Oil Bulletin Industry Survey. Industry puts the blame for its predicament squarely on the shoulders of the federal and Alberta governments, according to the survey, which was completed in December 2018.

Over two-thirds of the 150 survey respondents from exploration and production, oilsands and midstream companies said they are pessimistic about the future of the industry, with 36 per cent of them saying they are very pessimistic, while only 27 per cent of companies expressed any degree of optimism – and a mere

three per cent saying they are very optimistic.

As a result, the outlook for capital spending by the oil and gas industry in 2019 is down substantially. Forty per cent of respondents said they are planning to cut capital spending this year, roughly twice as many as last year, and only 16 per cent are planning to increase spending.

And the focus of capital spending shifted between this year and last year. Last year, exploration and development took top position, with 57 per cent of respondents selecting it as one of their top three opportunities for capital spending. This year, maintenance, repair and operations was the most commonly identified opportunity at 49 per cent, while

exploration and development dropped 36 percentage points – and two places – to 21 per cent.

Even more disconcerting, at least in terms of oil and gas activity in Canada, is where survey respondents expect their most significant growth to happen. A quarter of companies said they would focus on growing in the U.S., just seven percentage points less than Alberta, the traditional heart of the Canadian industry.

Regulatory concerns and market access and diversification issues were cited as the main reason for the pessimism in the industry. Half of companies cited regulatory concerns and 49 per cent said market access – an increase of 25 points and 13 points, respectively, from last year's survey – when



asked to select the three most significant constraints to capital spending growth.

Based on survey results regarding government performance and policies, most of the blame for the Canadian oil and gas industry's current predicament appears to fall on the federal government, and less so the Alberta government, with the energy agenda of the Trudeau government widely seen as diametrically opposed to the interests of the industry.

Eighty-six per cent of survey respondents assigned the federal government a failing grade for its handling of the energy file, and 78 per cent gave it an F-grade. Four-fifths of companies said Bill C-69 would limit construction of new pipeline projects altogether,

and another 14 per cent indicated it would delay them substantially. In terms of the federal carbon tax, almost three-quarters of respondents said it would put the Canadian oil and gas industry at a significant cost disadvantage over other oil producing countries.

At the same time, companies see the main roles of government in the energy industry to be highly divergent from the ones espoused by the Trudeau government.

Survey respondents put market access and establishing the right fiscal, tax and regulatory regimes at the top of their list, and ones important to the federal government—national climate policy, diversifying the energy industry, and strengthening First Nations relations on energy projects—at the bottom.

The Alberta government fared somewhat better in the eyes of survey respondents. Sixty-four per cent of companies assigned Alberta a failing grade for its handling of energy industry issues, and almost half a F-grade. When asked if the NDP's efforts to improve Alberta's environmental image had helped move pipeline projects forward, 86 per cent of respondents said no.

The lone ray of sunshine in this year's survey related to Canada's fledgling LNG export industry. Fifty-five per cent of respondents said they were optimistic about LNG exports within the next five years, almost twice as many as last year's survey, likely due to the positive FID for the Royal Dutch Shell-led LNG Canada project in October 2018.

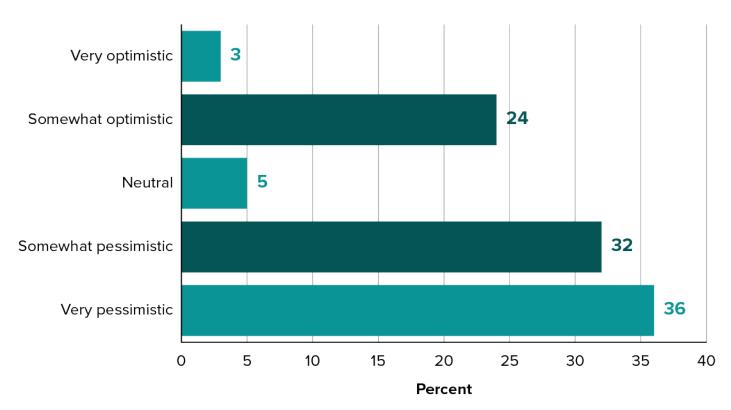
STATE OF INDUSTRY

Survey respondents see an industry in decline

Optimism about the Canadian oil and gas industry continues to falter based on this year's survey results. Sixty-eight per cent of respondents reported being pessimistic about the industry's future, while only 27 per cent expressed any degree of optimism. This pessimism was especially evident at the extremes,

with 36 per cent saying they were very pessimistic, compared to a mere three per cent that said they were very optimistic. The proportion of companies saying they were very pessimistic about the future of the industry more than doubled compared to last year's survey.

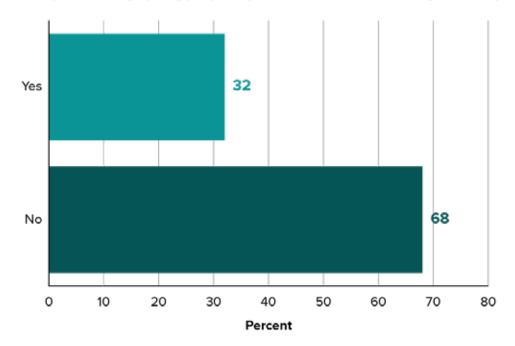
How optimistic are you about the future of the oil and gas industry in Canada?



In response to the related question, whether they would encourage young people to pursue a career in the oil and gas industry, 68 per cent of respondents

said no, an increase of five percentage points from last year's survey.

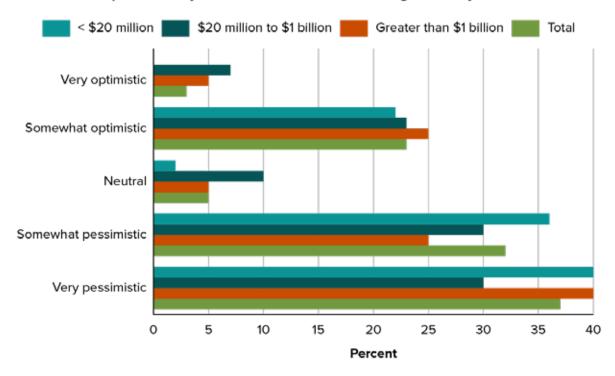
Would you encourage young people to pursue a career in the oil and gas industry?



Pessimism about the future of the Canadian oil and gas industry runs rampant, but small companies (less than \$20 million in annual revenue) tend to be more pessimistic than the others. Over three-quarters of survey respondents from small oil companies expressed pessimism about the industry's future, more than three times those expressing optimism,

and none of them said they were very optimistic. In contrast, the ratio of pessimistic to optimistic respondents tended to be more like two-to-one for large (greater than \$1 billion) and medium-sized companies, with 30 per cent of each grouping expressing some degree of optimism.

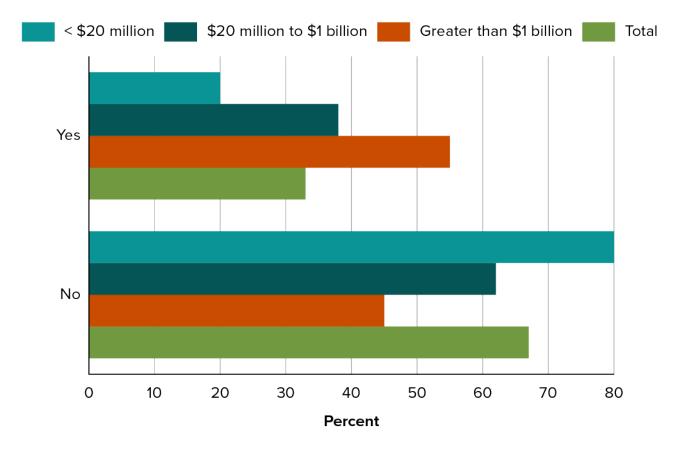
How optimistic are you about the future of the oil and gas industry in Canada?



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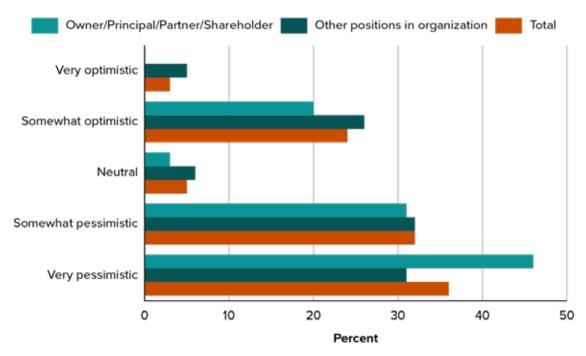
The relative pessimism of small companies also showed up when asked if they would encourage young people to pursue a career in the oil and gas industry, while large companies were relatively optimistic. Eighty per cent of respondents from small companies indicated they would not, four times more than said they would. In contrast, 55 per cent of large companies indicated they would encourage young people to pursue a career in their industry.

Would you encourage young people to pursue a career in the oil and gas industry?



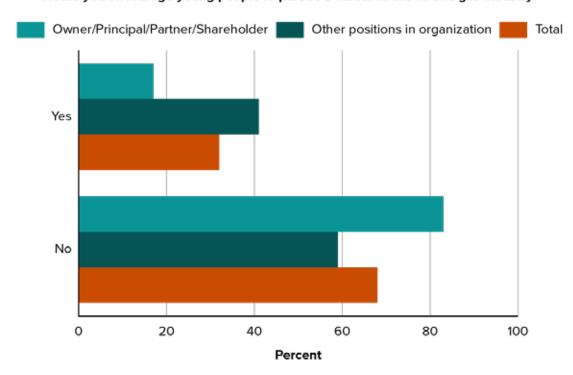
Pessimism may be widespread in the Canadian oil and gas industry, but it is especially prevalent among those holding ownership stakes in companies. Seventy-seven per cent of owners are pessimistic about the future of the industry, compared to 63 per cent of non-owners. Owners are almost four times more likely to be pessimistic than optimistic about the industry; non-owners around two times.

How optimistic are you about the future of the oil and gas industry in Canada?



The pessimism of owners is even more apparent when asked if they would encourage young people to pursue a career in the oil and gas industry. Eightythree per cent of owners said no, compared to 59 per cent of non-owners.

Would you encourage young people to pursue a career in the oil and gas industry?



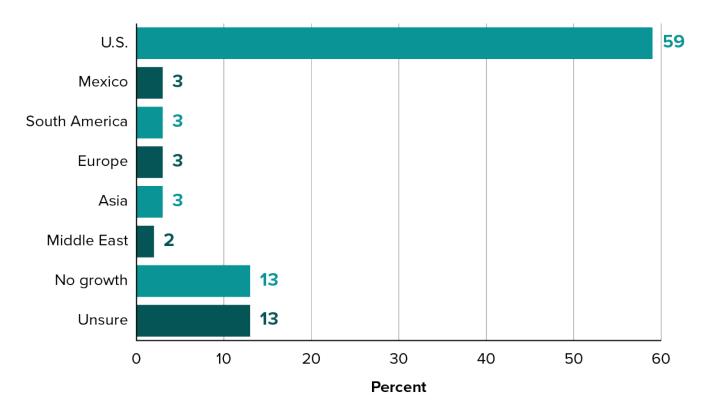
Investment leaving industry

The exodus of investment from the Canadian oil and gas industry continues. Forty-six per cent of survey respondents said they were planning to shift investment to markets outside of Canada in the future, compared to 54 per cent with no plans to do so.

Of the companies planning to invest outside of Canada, the U.S. was by far the most likely

destination, with three-fifths of respondents planning to shift investment dollars there. None of the other potential destinations for Canadian investment was cited by more than 3 per cent of oil-related companies.

Where are you planning on shifting investment to grow your business?



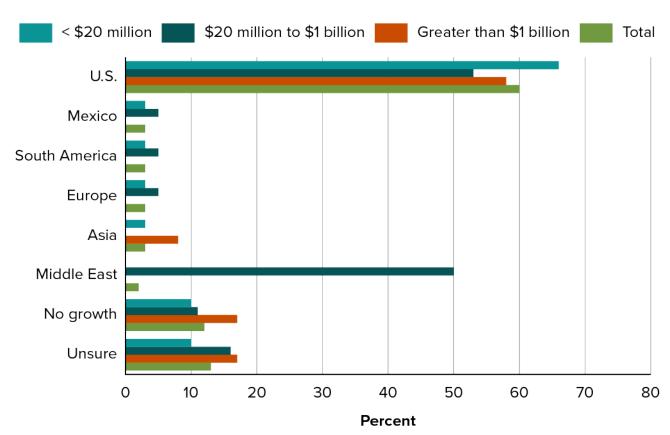
Foreign Investment

Although many Canadian companies are planning to shift investment away from Canada, large companies (greater than \$1 billion in revenue) are more likely than the others. Fifty-three per cent of large companies said they were planning to do so, compared to 50 per cent of small companies (less than \$20 million) and 38 per cent of medium-sized ones.

Of the companies planning to invest outside of Canada, the U.S. is the most likely target market

for every sized company, but this is especially the case for small ones. Two-thirds of respondents from these companies are planning to invest in the U.S., compared to 58 per cent of large companies and 53 per cent of medium-sized ones. Medium-sized companies are the most likely to be targeting non-U.S. foreign markets, at 21 per cent.

Where are you planning on shifting investment to grow your business?

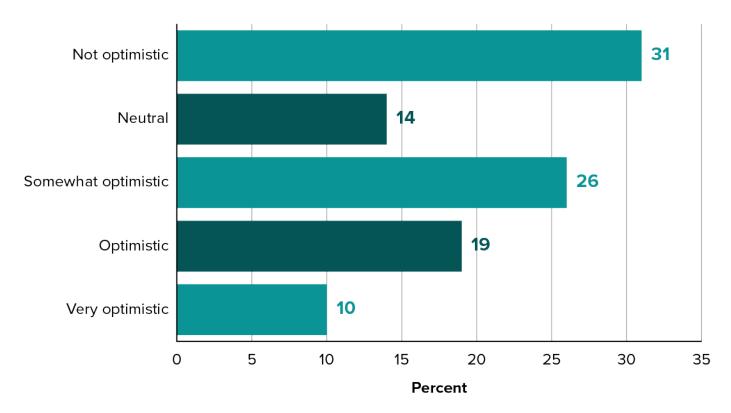


Future of LNG

A relative bright spot for the Canadian oil and gas industry is the fledgling LNG exports industry, especially compared to last year's survey. Fifty-five per cent of this year's respondents said they were optimistic about LNG exports in the next five years, while 45 per cent indicated they were not optimistic

or neutral. In contrast, only 29 per cent of companies expressed optimism about the Canadian LNG exports last year. The positive final investment decision (FID) for the Royal Dutch Shell-led LNG Canada project on the B.C. coast in October 2018 likely contributed to this turnaround in sentiment.

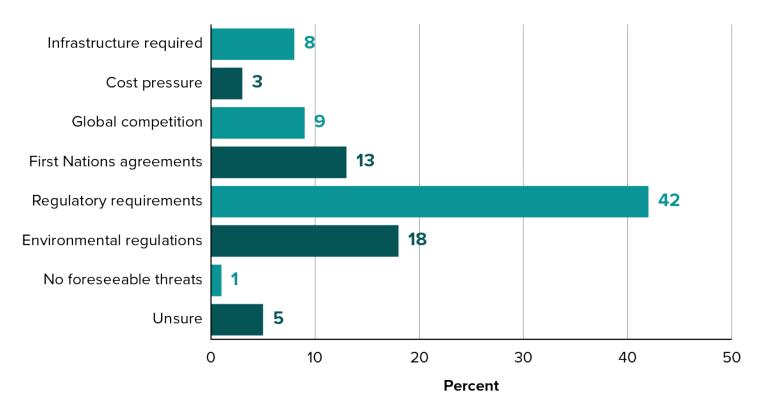
How optimistic are you about LNG as an opportunity for Canadian export in the next five years?



All the same, when asked what they see as the biggest threat to Canadian LNG opportunities, almost three-quarters of respondents cited either regulatory requirements, environmental regulations or First

Nations agreements – 42 per cent, 18 per cent and 13 per cent, respectively – similar to last year's survey results.

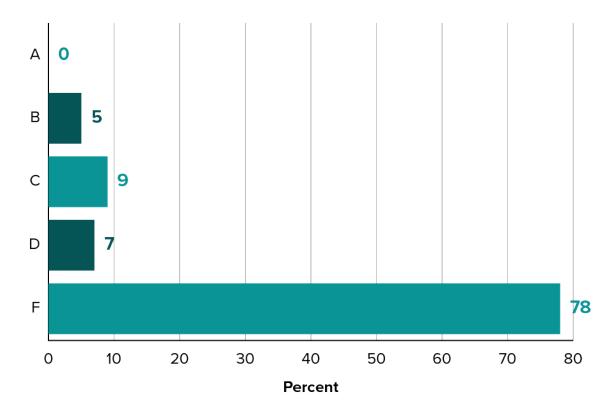
What does your organization consider the biggest threat to Canadian LNG export opportunities?



Grading government performance

Survey respondents said the Canadian and Alberta governments failed to help the industry throughout the recent downturn. Eighty-five per cent of respondents gave the feds a failing grade this year (D or F), 4 percentage points more than last year, while F-grades increased from 56 per cent to a whopping 78 per cent. The federal government did not receive a single A-grade.

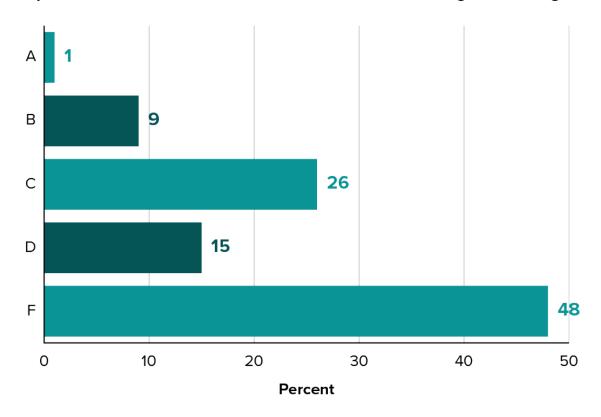
Grade the performance of the Federal Government on issues affecting the oil and gas industry.



The Alberta government was given failing grades by 63 per cent of respondents this year, compared 67 per cent last year, but F-grades increased 8 points

to 48 per cent. A-grades slipped 2 points to 1 per cent, B-grades 1 point to 9 per cent, while C-grades increased 5 points to 26 per cent.

Grade the performance of the Alberta Government on issues affecting the oil and gas industry.

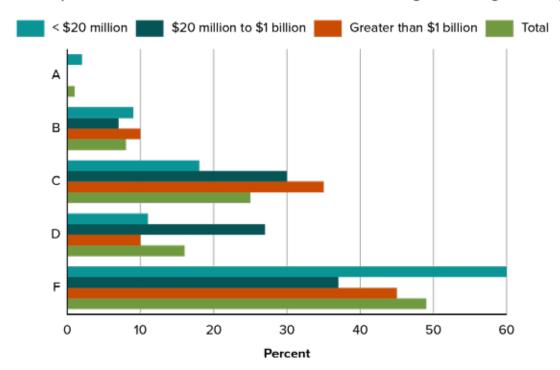


The federal government received miserable grades for its performance as it relates to the Canadian oil and gas industry, irrespective of size of oil-related company based on annual revenue. Eighty-seven per cent of small companies (less than \$20 million) gave the feds a failing grade, and 82 per cent an F-grade. Seventy-five per cent of large companies (greater than \$1 billion) assigned the federal government an F-grade, and 10 percentage points more a fail. Eighty-three per cent of medium-sized companies gave the feds a failing grade, and 73 per cent gave the government an F-grade.

Survey respondents did not grade the Alberta government as harshly as the federal government on the whole, but there was greater divergence between different sized companies (see next page). Small companies were the harshest critics of the province, with 71 per cent of respondents giving it a failing grade, and 60 per cent giving the government an F-grade. In contrast, only 45 per cent of large companies assigned the Alberta government a F-grade, and 10 points more a fail.

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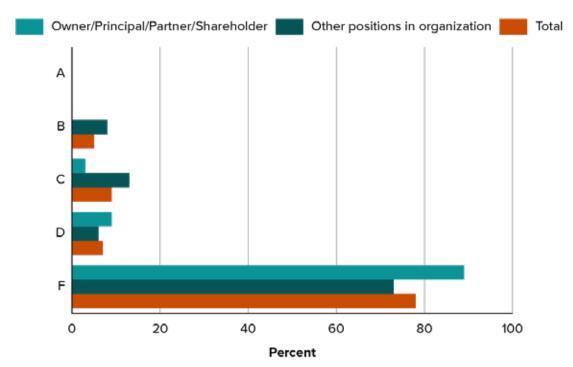
Grade the performance of the Alberta Government on issues affecting the oil and gas industry.



Owners of companies are far more critical of the performance of the federal government in relation to the Canadian oil gas industry than those who do not hold an ownership stake in their respective companies. Ninety-seven per cent of owners gave the

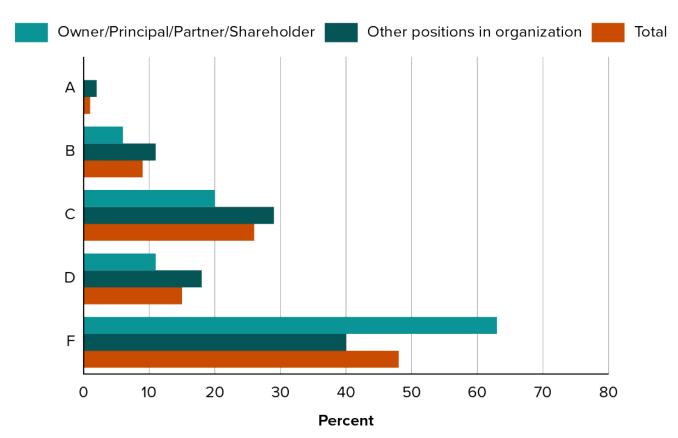
federal government a failing grade, with 89 per cent giving it an F-grade. In contrast, "only" 73 per cent of non-owners assigned the federal government an F-grade and 79 per cent a fail.

Grade the performance of the Federal Government on issues affecting the oil and gas industry.



Owners were also relatively harsh critics of the Alberta government's performance, although on the whole the provincial government fared somewhat better than the feds. Almost three-quarters of owners gave the Alberta government a failing grade, compared to 58 per cent of non-owners. Sixty-three per cent of owners assigned the provincial government a F-grade, and two-fifths of non-owners.

Grade the performance of the Alberta Government on issues affecting the oil and gas industry.

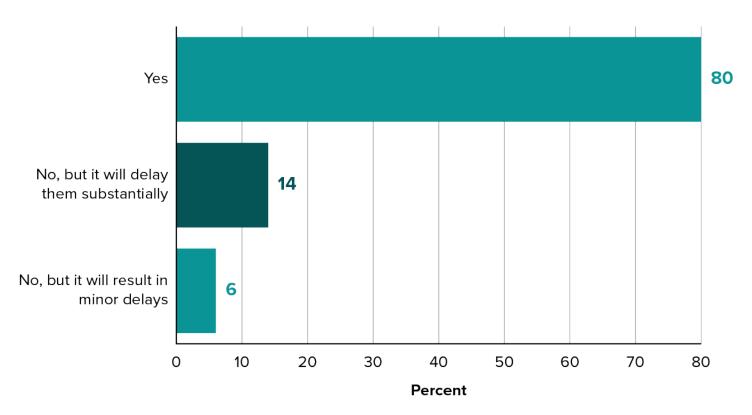


Federal policies unpopular with industry

The federal government's proposed regulatory reform legislation, Bill C-69, is widely viewed as an industry killer, not just by people associated with the oil and gas industry, but Canada's natural resource industry as a whole. Four-fifths of survey respondents said it would stop construction of new pipeline projects – a

17-percentage point bump from last year's survey – while another 14 per cent said it would delay them substantially. A mere 6 per cent of oil-related companies said Bill C-69 would lead to only minor delays to new pipeline projects.

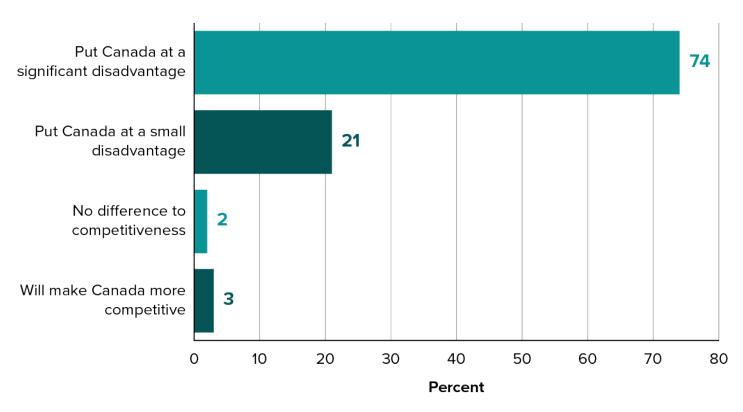
Will the NEB modernization (Bill C-69), which requires a review of upstream and downstream greenhouse gas emissions, limit new pipeline projects?



At the same time, survey respondents are extremely concerned about the impact of the federal government's carbon tax on the competitiveness of the Canadian oil and industry. Seventy-four per

cent of companies said it would put the industry at a significant cost disadvantage – an eight-point increase from last year – and another 21 per cent said it would put the industry at a small disadvantage.

How big of an impact will the Federal carbon tax have on the competitiveness of the Canadian oil and gas industry?

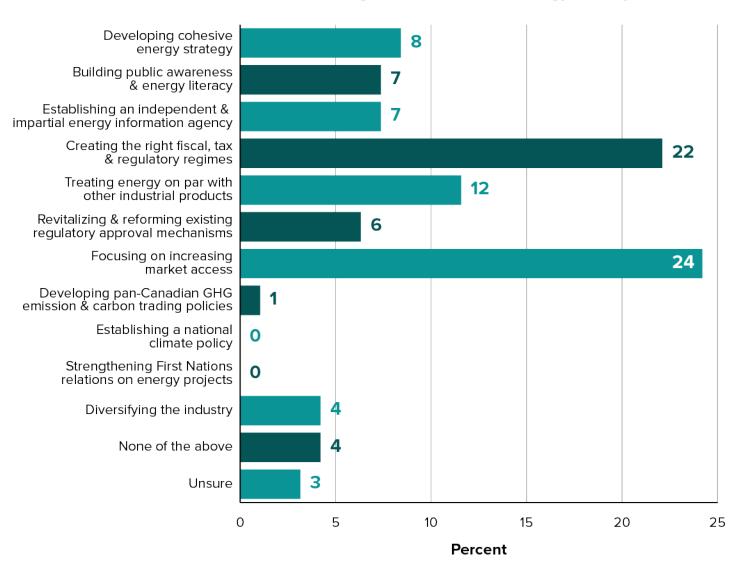


Industry, government at odds over role of government in industry

Survey respondents see the main role of government in the energy industry to be highly divergent from the ones the Trudeau government has been attempting to impose on the country. A quarter of oil-related companies said focusing on increasing market access should be the main role of government, 22 per cent cited establishing the right fiscal, tax and regulatory regimes, and 11 per cent said treating energy on par with other industrial products.

In terms of energy themes espoused by the Trudeau government, 4 per cent of respondents said diversifying the energy industry should be the main role of government, 1 per cent cited developing pan-Canadian GHG emission and carbon trading policies, and not a single company said establishing a national climate policy or strengthening First Nations relations on energy projects.

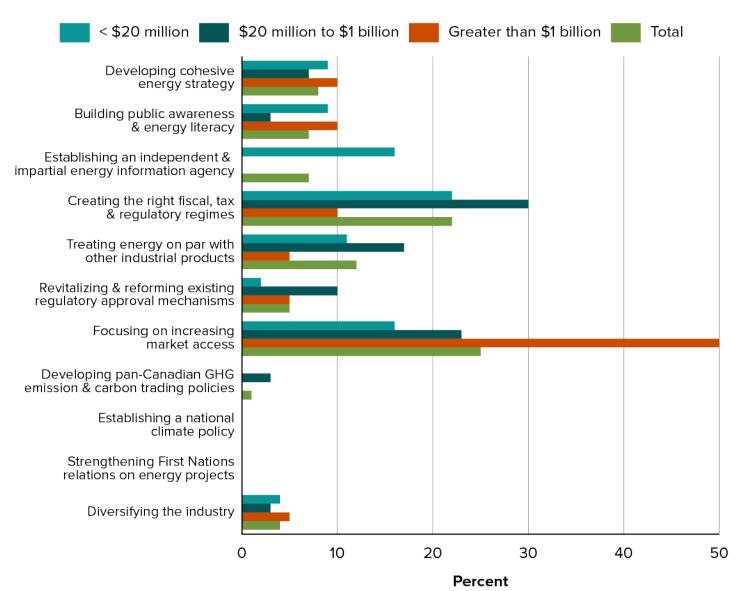
What should the main role of government be in the energy industry?



Survey respondents from all sized companies see the main role of government as very different from the Trudeau government's view, but the most common picks of companies differ. A half of large oil companies said expanding market access should be

the main role of government, whereas 30 per cent of medium-sized companies and 22 per cent of small companies cited creating the right fiscal, tax and regulatory regimes.

What should the main role of government be in the energy industry?

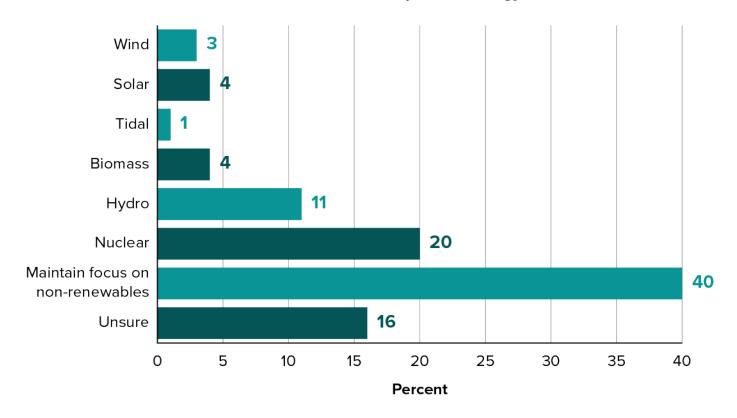


Energy diversification not a priority for industry

The disconnect between the Canadian oil and gas industry and the Trudeau government also can be seen in response to the question about promoting energy diversification. Forty per cent of oil companies said Canada should maintain focus on non-

renewables, a fifth cited nuclear power and 11 per cent said hydropower should be the main focus of energy diversification. Wind, solar, tidal power and biomass, the darlings of the Trudeau government, all fell below the 5 per cent threshold.

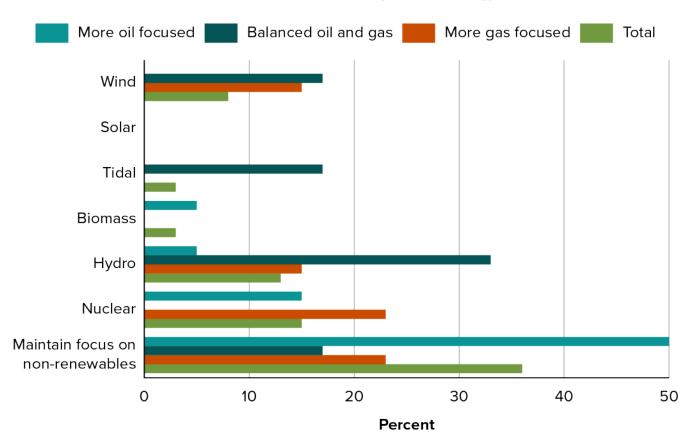
Where should Canada focus its efforts to promote energy diversification?



Energy diversification may be a priority of the Trudeau government, but it certainly is not for E&P companies, whatever their focus. Half of oil-focused companies, almost a quarter of gas-focused ones, and 17 per cent of balanced companies said Canada should maintain

its focus on non-renewables. The sole significant turn towards renewables was by balanced companies, with a third of them saying the country should focus its efforts on hydropower.

Where should Canada focus its efforts to promote energy diversification?

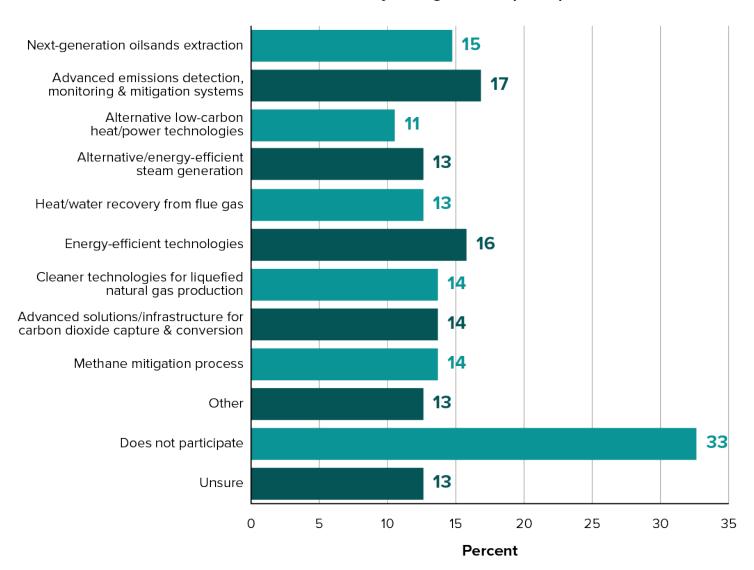


Clean-tech initiatives widespread

The Canadian oil and gas industry participate in a wide range of clean-tech initiatives, with 10 to 15 per cent of respondents indicating they use the most common ones. The exceptions are advanced

emissions detection, monitoring and mitigation systems at 17 per cent, and energy efficient technologies at 16 per cent.

Which clean-tech initiatives does your organization participate in?



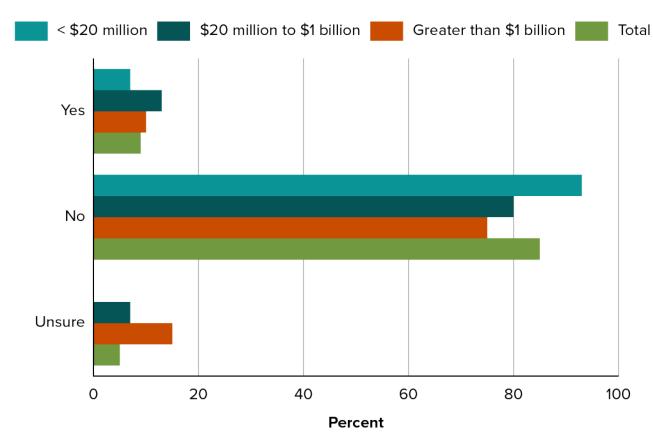
Alberta's Environmental Image

When asked if the NDP's efforts to improve Alberta's environmental image had helped move pipeline projects forward, survey respondents answered a resounding no. Eighty-six per cent of companies said the NDP's efforts had failed, 5 percentage points more than last year's survey, and almost ten times more than responded yes.

A significant majority of respondents from every sized oil-related company believe the NDP's efforts to

improve Alberta's environmental image have failed to move pipeline projects forward. But small companies have been especially dismissive of the NDP government's efforts, with 93 per cent of respondents saying they have not helped, compared to four-fifths of medium-sized ones and three-quarters of large companies.

Has the NDP's efforts to improve Alberta's environmental image helped move pipeline projects forward?

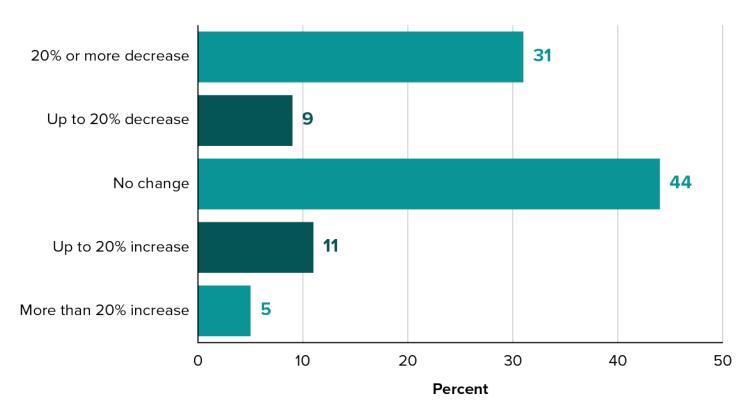


Capital spending declining

The outlook for capital spending by the Canadian oil and gas industry in 2019 is trending downward. Forty per cent of respondents said they are planning to decrease capital spending this year, roughly twice as many as last year, and only 16 per cent plan to increase spending.

The shift in capital spending between this year and last is especially evident at the extremes. Thirty-one per cent of companies are planning to slash spending by 20 per cent or more, a 13 point bump from last year, while a mere 5 per cent of companies are planning to increase spending by 20 per cent or more – a decline of 11 points.

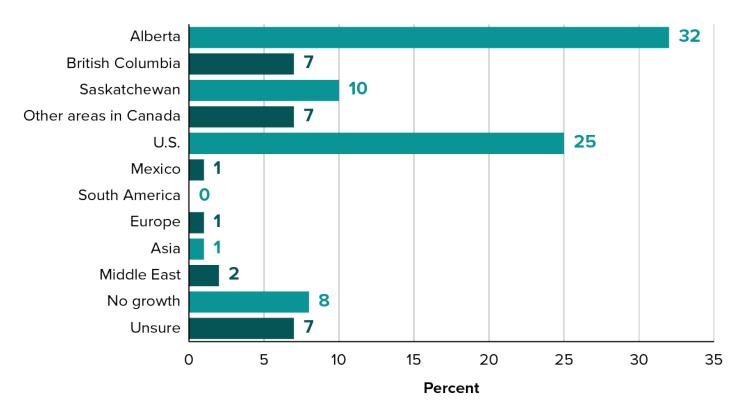
By how much do you expect your company to increase or decrease capital spending in 2019 compared to 2018?



Especially disconcerting, at least in terms of oil and gas activity in Canada, is where survey respondents expect their most significant growth in 2019. Thirty-two per cent may have cited Alberta, but a quarter

of oil-related companies said the U.S. Ten per cent said they would see their most significant growth in Saskatchewan, 7 per cent in British Columbia, and another 7 per cent elsewhere in Canada.

Where will be your most significant geographic growth be in 2019?



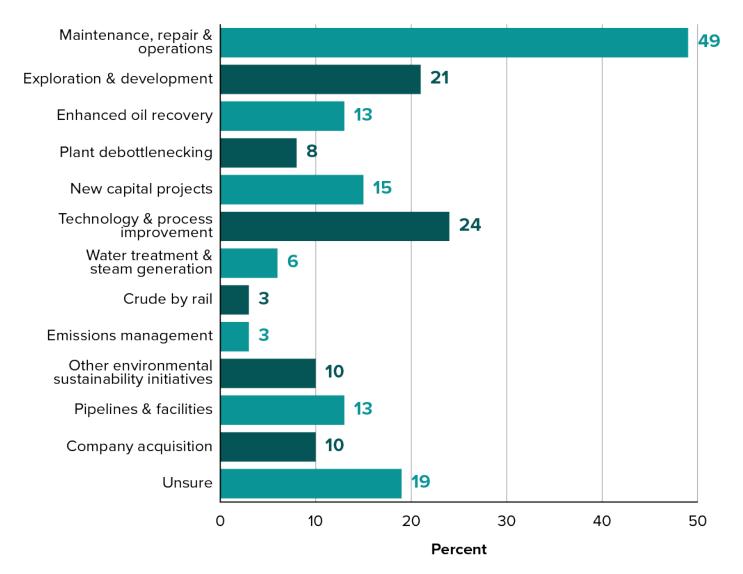
Opportunity shifts from drilling to MRO and process improvement

Survey respondents most commonly identified the same three opportunities for capital spending this year and last, when asked to select their top three, but a shift in order is indicative of the Canadian oil and gas industry's increasingly dire situation.

Last year, exploration and development took pole position, followed by maintenance repair and

operations and technology and process improvement. This year, exploration and development dropped two positions, and in the process declined by 36 percentage points to 21 per cent. In contrast, maintenance, repair and operations gained 6 points, as did technology and process improvement, to 49 per cent and 24 per cent, respectively.

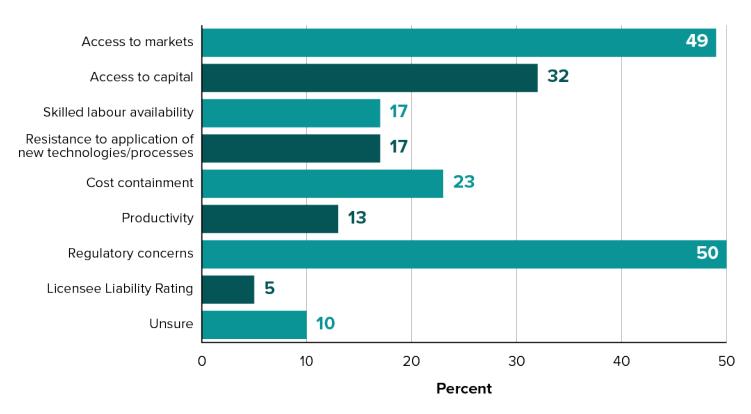
What are your organization's most significant opportunities for capital spending in 2019?



When asked to select the three most significant constraints for capital spending growth in 2019, regulatory concerns and access to markets surged to the top of the list, overtaking cost containment, oil-related company's number one constraint last year.

Regulatory concerns doubled to 50 per cent, while access to markets increased 13 points to 49 per cent. Access to capital rounded out the top three this year at 32 per cent, but this represented a decline of 4 points.

What are your organization's most significant growth constraints for 2019?

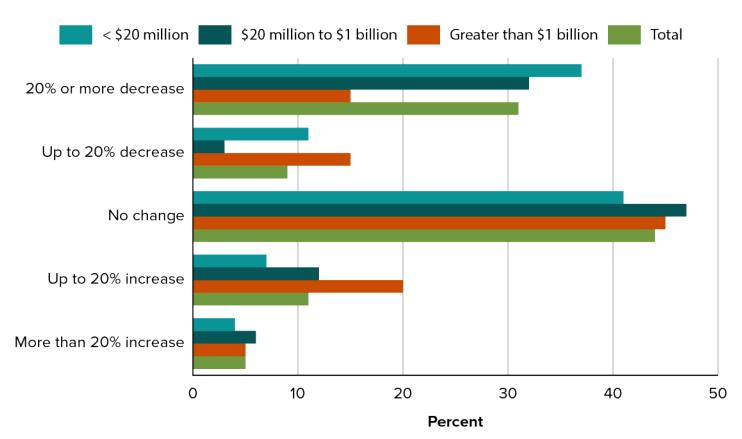


Smaller companies cutting harder than their larger counterparts

Capital spending plans are more likely to be trimmed than not for all sized oil-related companies in 2019, but spending plans of smaller companies are to be hit harder than larger ones. Forty-eight per cent of respondents from small companies (revenues less than \$20 million) said they are going to decrease capital spending this year, more than four times those planning an increase.

In contrast, 30 per cent of large companies (greater than \$1 billion) said they were going to decrease capital spending, just 5 percentage points more than those planning and increase. In addition, 37 per cent of small companies said they were going to cut capital spending by 20 per cent or more, compared to only 15 per cent of large companies.

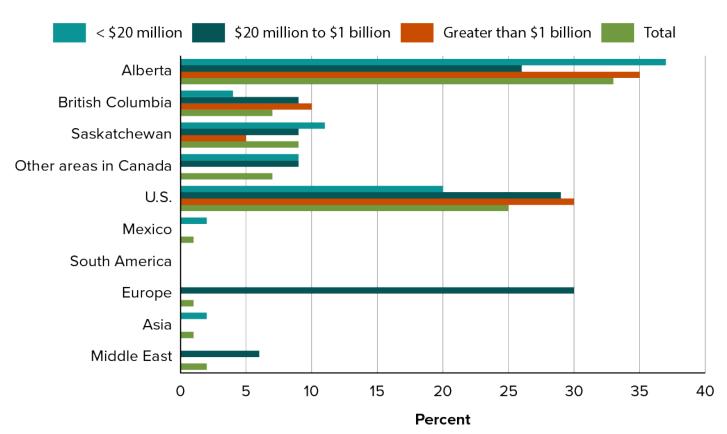
By how much do you expect your company to increase or decrease capital spending in 2019 compared to 2018?



At the same time, the larger the company, the more likely it is going to see its most significant growth outside of Canada in 2019. For example, 30 per cent of large companies said the U.S. would be their number one growth region this year, compared

to 29 per cent for mid-size companies and just a fifth of small ones. On the flip side, 61 per cent of small companies said Canada would be their most significant region of growth, compared to 53 per cent for mid-size companies and a half of large ones.

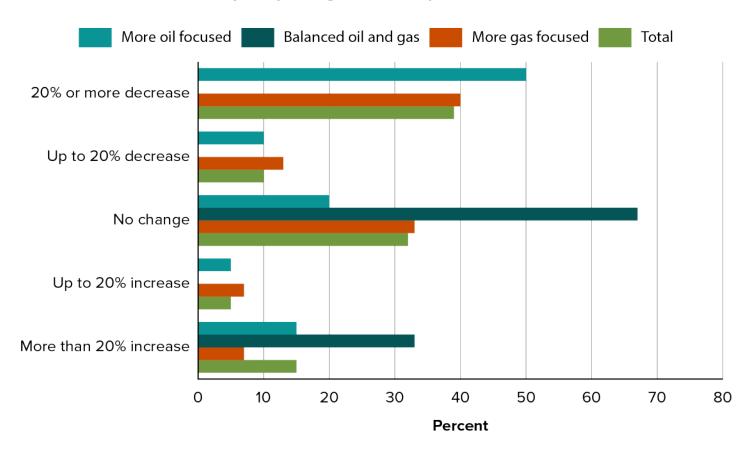
Where will your most significant geographic growth be in 2019?



Oil-focused and gas-focused E&P companies are much more likely to be planning to decrease capital spending in 2019 than increase it based on the survey results, whereas companies with a balanced production portfolio are actually upbeat about spending (see next page). Sixty per cent of respondents from oil-focused companies said they are planning to cut capital spending this year, three

times more than plan to increase it. Fifty-three per cent of gas-focused companies are planning to cut capital spending, over four times more those planning to increase. In contrast, a third of respondents representing balanced companies said they were planning to increase capital spending this year, and none indicated plans to cut.

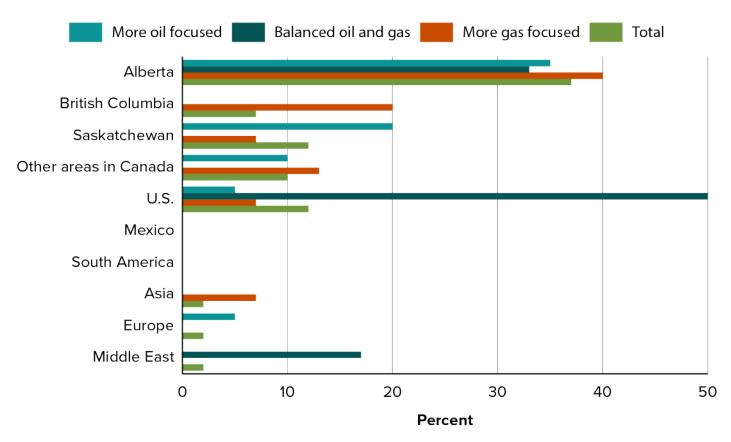
By how much do you expect your company to increase or decrease capital spending in 2019 compared to 2018?



A possible reason for the divergence in capital spending plans between oil and gas-focused E&P companies on the one hand and balanced companies on the other, may relate to the region where each group expect their most significant growth this year. A half of balanced companies said the U.S. would be their most significant growth region, compared to 7

per cent of gas-focused companies and 5 per cent of oil-focused ones. In contrast, four-fifths of gas-focused companies and almost two-thirds of oil-focused ones said Canada would be their main source of growth, while only a third of balanced companies said the same.

Where will your most significant geographic growth be in 2019?

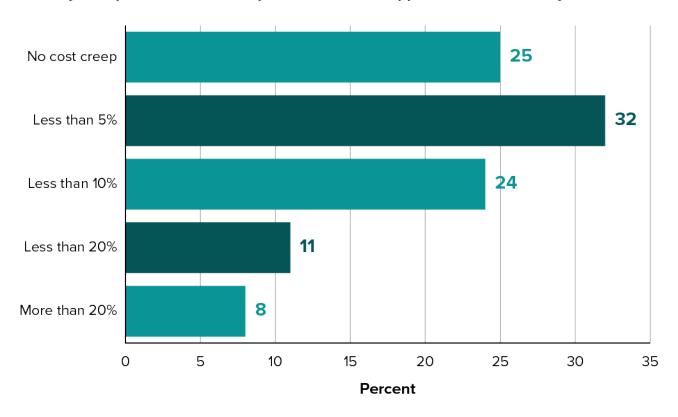


Cost creep happening, but subdued due to market conditions

The rebound in the Canadian oil and gas industry in 2018, especially in the first half of the year, led companies to experience more cost creep on services and supplies than in 2017. Seventy-five per cent of survey respondents suffered cost creep last year, an increase of 9 percentage points from the year before.

But cost creep tended to be relatively subdued in 2018, with 56 per cent of oil-related companies reporting increases of less than 10 per cent, a 4 point rise from 2017. Nineteen per cent of respondents reported an increase of 10 per cent or greater last year, more than double the year before.

Have you experienced cost creep on service and supplies in 2018? If so, by how much?

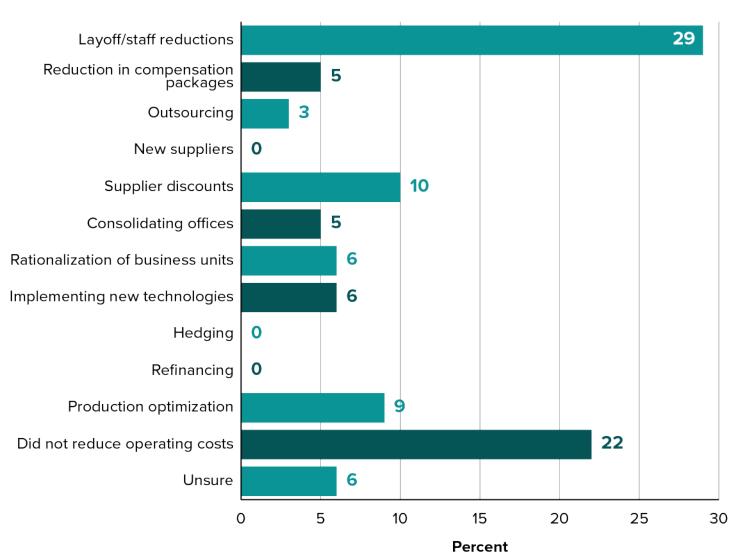


Cost reductions

The three main ways companies reduced operating costs last year were layoff/staff reductions, supplier discounts and production optimization. Layoff/staff reductions were by far the most common method of reducing costs, with 29 per cent or respondents citing it as their main source of savings, an increase

of 3 points from 2017. Ten per cent of companies said supplier discounts and 9 per cent production optimization, flat and down 7 points, respectively, from the year before. Over a fifth of respondents reported no reduction in operating costs in 2018.

If your organization has been able to reduce costs in the last year, what was the main source of those savings?

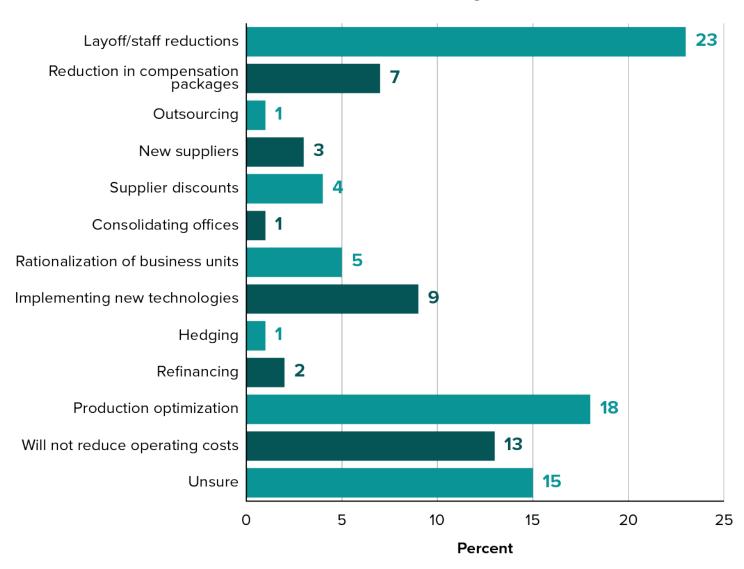


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The three most common ways companies are hoping to reduce operating costs this year are layoff/staff reductions, production optimization and implementing new technologies. Twenty-three per cent of respondents said layoff/staff reductions would be their main source of cost savings in 2019, the

same percentage as last year. Eighteen per cent of companies said production optimization, a decline of 4 per cent from last year. Nine per cent cited implementing new technologies, a decline of 7 per cent. Thirteen per cent of respondents said they do not expect to reduce operating costs this year.

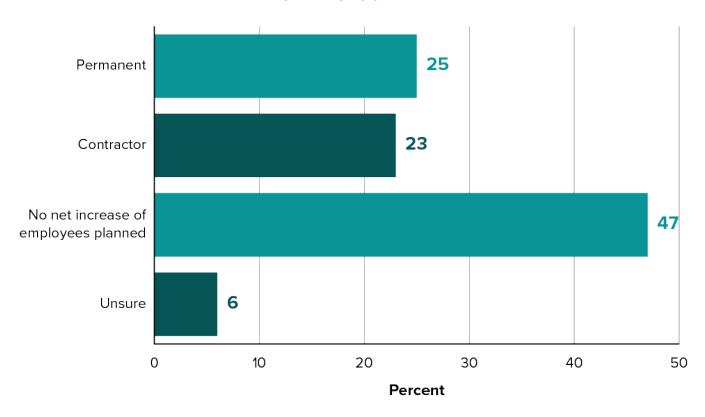
If your organization is seeking cost savings in the next year, what will be the main source of those savings?



Almost half of companies are planning to add employees on a net basis in 2019, with a quarter

to add primarily permanent staff and 23 per cent primarily contractors.

If your organization is planning on a net increase of employees in 2019 would the roles be filled primarily by permanent staff or contractors?

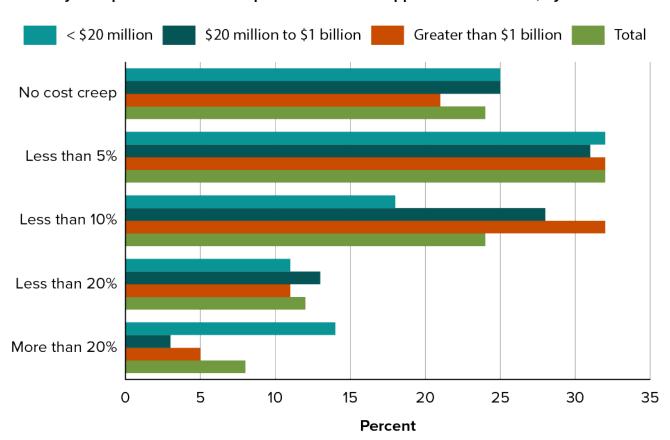


Smaller companies facing more challenges

Cost creep was remarkably consistent across different sized oil-related companies based on revenue last year. Large companies (greater than \$1 billion) suffered slightly greater cost creep than small (less

than \$20 million) and medium-sized companies – at 79 per cent, 4 percentage points more – whereas small companies were more likely to experience cost increases greater than 20 per cent.

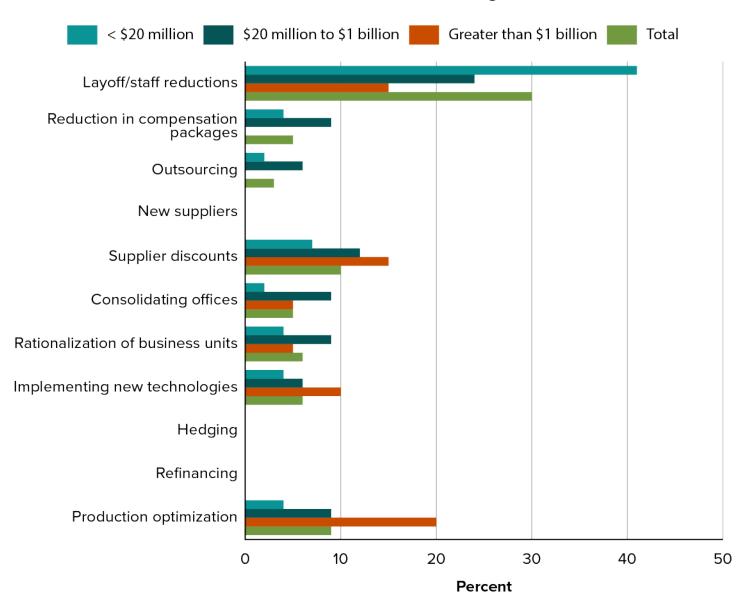
Have you experienced cost creep on service and supplies in 2018? If so, by how much?



Layoff/staff reductions were by far the most common way companies reduced operating costs last year, especially for small and medium-sized companies. Forty-one per cent of small companies cited layoff/ staff reductions as their main source of cost savings last year, and almost a quarter of medium-sized

companies. In contrast, 15 per cent of large companies said layoff/staff reductions, the same proportion as cited supplier discounts.

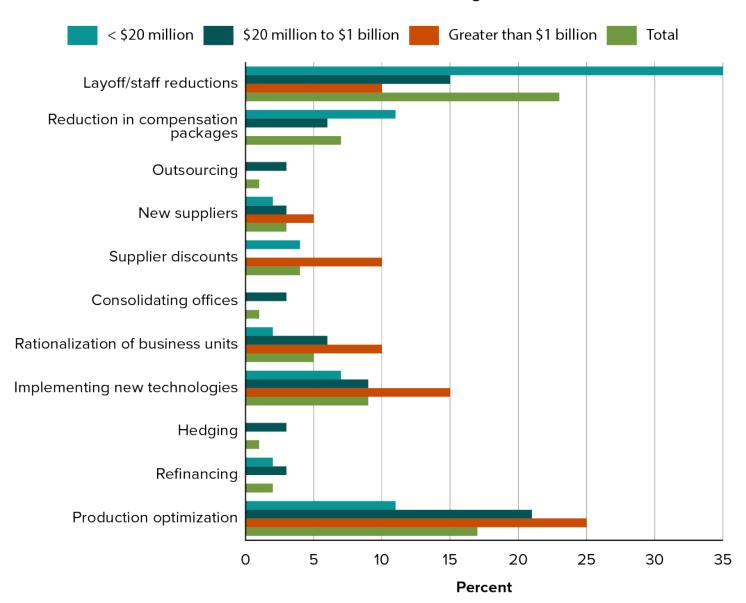
If your organization has been able to reduce costs in the last year, what was the main source of those savings?



Layoff/staff reductions are expected to be the main way of reducing operating costs for small and medium-sized companies again in 2019, whereas implementing new technologies takes the pole position for large companies (see next page). Over a third of small companies and fifteen per cent of

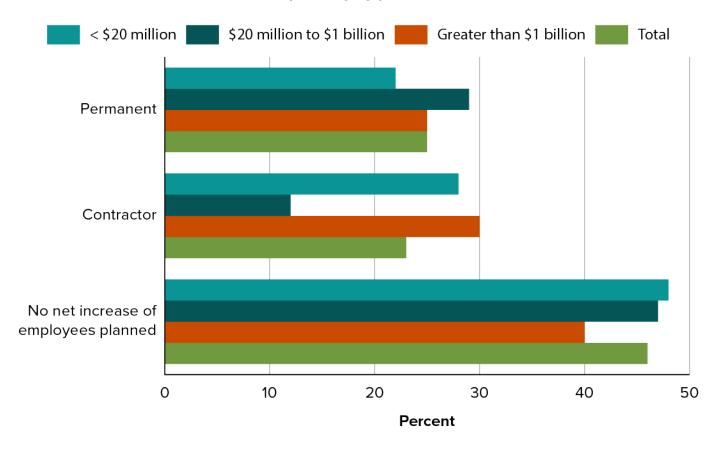
medium-sized ones said layoff/staff reductions would be their main source of cost savings this year. Fifteen per cent of respondents from large companies said implementing new technologies would be their main source.

If your organization is seeking cost savings in the next year, what will be the main source of those savings?



Small and large companies are more likely to be adding employees on a net basis this year compared to medium-sized companies, but with the latter planning to add relatively more permanent staff than contractors. Fifty-five per cent of large companies and a half of small ones are planning to add employees on a net basis, with less than half being permanent staff. In contrast, 41 per cent of medium-sized companies are planning to add employees this year, around 70 per cent of which are to be permanent.

If your organization is planning on a net increase of employees in 2019 would the roles be filled primarily by permanent staff or contractors?





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