

## Scores

	Green	Lib	NDP	SP
1. Carbon pricing	2 F	6 C	3 D	0 F
2. Renewable power	8 B	7 B	6 C	5 C
3. Coal phase-out	9 A	7 B	5 C	1 F
4. Green jobs and retraining	9 A	6 C	9 A	2 F
5. Home & business energy efficiency	4 D	7 B	7 B	2 F
6. Venting, flaring & leaks	3 D	7 B	5 C	1 F
7. Bitumen pipelines	3 D	2 F	2 F	0 F
8. Nuclear power	10 A	6 C	5 C	0 F
9. Carbon capture and storage	10 A	10 A	10 A	1 F
10. Electric vehicles	8 B	5 C	5 C	3 D
11. Indigenous rights	7 B	6 C	7 B	0 F
12. Understanding of climate justice	5 C	8 B	8 B	0 F
<b>AVERAGE</b>	<b>6.5 C+</b>	<b>6.4 C+</b>	<b>6.0 C+</b>	<b>1.3 F</b>

## **Disclaimer**

**This assessment is based on responses from a limited sample of candidates from each party:**

**The Green Party of Saskatchewan responses were given by the leader, Victor Lau, and so should be seen as generally representative of the party. However, Green parties tend to permit a fairly generous degree of dissent from the official party line, so voters may wish to ask their local candidate for their position on matters of particular importance or interest.**

**The Liberal Party of Saskatchewan responses are from the one candidate who responded to our questionnaire. It is possible that, on matters not included in the party platform, other candidates may take a different position.**

**The NDP responses were given by the candidate who was the party's environment critic in the last sitting of the Legislature, and were checked with party HQ. We can therefore assume that all candidates would be expected to conform to the positions set out.**

**The Saskatchewan Party responses are from the one candidate who responded to our questionnaire. We believe that on most points, though not necessarily on all, these responses are representative of the party.**

## 1. Carbon pricing

Are you in favour of Saskatchewan adopting some form of carbon pricing?

If yes, what option would you prefer, and why?: carbon tax / cap and trade / fee and dividend / other (please specify) / don't know

If no, why not?

### General comments from CJS

Carbon pricing schemes use market mechanisms to reduce the attractiveness of high-emissions options, potentially economy-wide, when compared with lower-emissions options (and, specifically, efficiency/conservation and renewables). They also ensure that, instead of the present situation in which the atmosphere is used as a free dump for products of combustion, polluters pay their full “externality costs” - according to the latest IMF study, these amount to about \$1250 per Canadian per year, effectively paid for in health, environmental management, infrastructure and insurance costs.

Ontario and Manitoba have committed to join Quebec and California in a cap and trade system – in this type of scheme, government sets large emitters a maximum emissions target, and gives or sells permits to emit up to the level of that cap. A corporation which is able to hold its emissions well below its cap can then sell permits, and a corporation which finds it is going to exceed its cap can buy them. The price of carbon is then set by the market – which determines the price at which government can sell permits. Cap and trade schemes were used successfully to reduce the impacts of acid rain in the 1980s. However, greenhouse gas emissions are more complex, with a great variety of different types of emitters and a lower level of predictability. In practice, GHG cap and trade schemes are limited to large emitters, require substantial bureaucratic support to administer them, are subject to “leakage”, require complex legislation, do not respond well to economic volatility, and are more likely to provide jobs in corporate law and financial trading than in the real economy. Hence all three of the economists responsible for the emergence of this idea (John Dales, Thomas Crocker and David Montgomery) expressed scepticism about its use in this context. Certainly, the European cap and trade scheme has proved unreliable, and the California and Quebec schemes have seen the carbon price (and hence the incentive to shift to clean energy) drift downwards.

A carbon tax is a much simpler option. If charged at the point of entry of fossil fuels into the economy (the well, the mine or the port), it can be comprehensive. It can – as in British Columbia – be effectively revenue-neutral, an opportunity to reduce other more conventional forms of taxation. The BC scheme, which has been running since 2008, has been modestly successful.

A potentially more attractive variant on the carbon tax is Fee and Dividend. The fee is again charged at the point of entry of fossil fuels into the economy, and is again proportional to their ultimate GHG emissions, but the money collected by government is then distributed, in its entirety, equally among all citizens as a dividend. While the price of fossil fuel increases, this is more than compensated for about 2/3 of the population by the dividend – only the wasteful and the wealthy are penalised, and the overall effect is moderately progressive. Because government is not dependent on the fee, it is not locked into dependence on the carbon economy. Furthermore, because most people obtain a net benefit, there is considerable potential for public support for an increase in the fee rate.

However, carbon pricing alone is not adequate. There is no point in making the dirty options more expensive than the clean options if the clean options are unavailable to the public. Therefore investment is necessary in green infrastructure (for example public transit, or electric vehicle charging stations), in enabling green business start-ups (for example to manufacture state-of-the-art energy efficient pumps or fans or windows), in research and development, and possibly in low-interest loans to industry for efficiency measures. Some argue that these should be funded by a carbon tax. Advocates of Fee and Dividend need to seek other sources – for example, increased royalties for resource extraction.

### Green Party of Saskatchewan:

*from Victor Lau (party leader):*

No. Sask Green Party feels we have not fully exhausted all the positive actions we could take as a government before imposing a carbon tax. We could put in a high feed-in tariff to get people/businesses to create green energy. We could create a provincial transportation strategy to efficiently move goods and people plus lower carbon emissions. We have to review how much carbon we are releasing into the atmosphere, then take steps supported by the people to lower carbon emissions (likely to zero).

*CJS assessment:*

The refusal to consider carbon pricing demonstrates ignorance of the options available, the international (and BC) experience, the advice of energy economists and the reasons why other Green parties worldwide typically favour some sort of locally-appropriate carbon pricing (usually fee & dividend or carbon tax).

It should be noted that the Green Party of Canada, with which some GPS candidates are also affiliated, does strongly support carbon pricing, with a preference for Fee and Dividend. A feed-in tariff affects only electricity, and a high one could be counterproductive owing to an unnecessarily large increase in electricity prices (cf. the current backlash in Ontario). There are no specifics as to the provincial transportation strategy envisaged, and hence there is no evidence that any thinking has gone into this. Other important sectors (especially industrial heat) are not considered.

A “review of how much carbon we are releasing into the atmosphere” is publicly available in the National Inventory Reports which Environment Canada prepares for the United Nations Framework Convention on Climate Change. A leader who took climate change seriously would have perused these and at least sought expert advice on how to address Saskatchewan's massive per capita emissions figures – it appears that Mr Lau has not done so.

**2/10 F**

### Liberal Party of Saskatchewan:

*from Kevin Ber (candidate, Saskatoon Stonebridge Dakota):*

Yes. Carbon tax / Cap and trade: Both are great options, but each has pros and cons.

*CJS assessment:*

This is the only statement from any of the parties in favour of a serious carbon pricing mechanism. However, it is clear that the party has no plans for implementation. On CBC radio 1 Saskatchewan's BlueSky lunchtime programme, party leader Darrin Lamoureux stated that a Liberal government would introduce carbon pricing only after other jurisdictions had done so. It is not clear that he understands that BC and Alberta are already committed to a carbon tax, and Manitoba, Ontario and Quebec to a cap and trade scheme. It seems fair to assume that the party has not thought this through.

**6/10 C**

## New Democratic Party of Saskatchewan:

*from Cathy Sproule (environment spokesperson):*

We are proposing a Saskatchewan Green Innovation Technology Fund, to which high emitters that exceed specified limits would contribute. This money will be reinvested here in Saskatchewan to boost green innovation and create good jobs. This fund will be established in consultation with industry.

*from platform 2016 – regulatory and enabling policies possibly in lieu of true carbon pricing:*

- We will legislate tougher targets for greenhouse gas emission reductions: 32% below 2004 levels by 2025 and 80% below 2004 levels by 2050.
- We will establish an independent energy regulator with a mandate to oversee and regulate development of Saskatchewan's energy resources.
- We will establish a Saskatchewan Green Innovation Technology Fund, in consultation with industry.

*CJS assessment:*

The proposal here is to set caps on emissions, impose a fee on any emissions in excess of the cap, and use that money to establish a technology fund, to some of which the offenders would have access in order to improve their performance (though some might go to development of other technologies). This proposal appears to be no more than the proclaiming and implementation of the Management and Reduction of Greenhouse Gases Act, prepared by the Saskatchewan Party government and passed in the Legislature in 2010 (but never implemented). This Act is essentially a copy of legislation put in place in Alberta by the Progressive Conservative government, which did little or nothing to control the growth of greenhouse gas emissions there. The Notley government's decision to replace it with a carbon tax was a definite step forward: it is clear that Ms Notley's sister party in Saskatchewan lacks the courage or vision to follow her lead.

Legislating targets is of little use without the policies to ensure that those targets are met. There is no sign of a coherent and comprehensive set of policies to achieve this, and so the targets are probably best ignored until such a set of policies is developed. (If we use the internationally-accepted baseline year of 1990 instead of 2004, these targets represent an increase in emissions limited to 5.5% by 2025 and a reduction in emissions of 69% by 2050. The reason that these numbers look so different is the dramatic increase in GHG emissions in Saskatchewan between 1990 and 2004: incidentally, for all but one year of that period the NDP was in office.) To satisfy the temperature targets set in the 2015 Paris Agreement, current climate models indicate a need to reduce net emissions to zero by 2050: hence anything less than a 100% target for that year should be assumed to be inadequate.

Appointing a truly independent Energy Regulator could – depending on his/her remit – be a positive step towards climate-aware practice. We would need to see the responsibilities and powers of this official in order to assess the value of this initiative.

**3/10 D**

## Saskatchewan Party:

*from Jamie Brandrick (Saskatoon Nutana candidate):*

No. Premier Wall has been very vocal on this issue. Now is not the time for a carbon tax or carbon levy, we believe a carbon tax would kneecap an already soft economy.

*from platform 2016 – no mention of carbon pricing, and only this on regulation:*

Creation of the Saskatchewan Environmental Code and results-based regulations focuses on outcomes instead of regulatory processes, bringing better protection to our environment and less red tape.

*CJS assessment:*

The refusal to consider carbon pricing demonstrates ignorance of the options available, the international (and BC) experience, and the advice of energy economists.

Mr Brandrick's responses, combined with Mr Wall's "vocal" outbursts on this issue, show a fundamental lack of understanding both of the seriousness of the climate crisis and of the economic potential of a rapid shift to clean energy. It appears that the Saskatchewan Party is not even prepared to consider the fossil-free future for which we need to be preparing.

**0/10 F**

## 2. Renewable power

What role do you see for renewable power (wind, solar, hydro, biomass, geothermal) in SaskPower's future portfolio? What targets do you favour for its adoption?

### General comments from CJS

The electrical sector is probably the easiest to decarbonise. A comprehensive plan needs to include both measures to drive efficiency (often known as demand-side management) and a rapid shift from fossil fuels to renewable sources.

The rate at which demand grows is crucial to the viability of such a shift. Current SaskPower demand projections anticipate very rapid growth in heavy industrial demand, especially from potash mines and pipelines. Hence the SaskPower commitment to achieve 50% renewables capacity by 2030 actually also assumes some growth of fossil power (probably gas, maybe some coal with carbon capture and storage).

Demand growth should also come from other, more sustainable sources. A shift from gasoline and diesel to battery-electric vehicles will substantially increase overall electrical demand. Certain industrial processes (e.g. steel making) can best eliminate fossil fuel use by shifting from gas or fuel oil heating to renewable electricity. With renewable electricity, ground-source heat pumps could enable homes and offices to become fossil-free.

Hence it is important to hear from politicians not only what proportion of the province's electricity they plan to provide from renewables, but also how much fossil power they will displace in the process. Furthermore, it is important to see not only targets but the means of achieving them.

In order to satisfy the Paris temperature goals, whole-society net carbon dioxide emissions almost certainly need to have reached zero by 2050. Because other sectors depend on renewable electricity in order to achieve this, the electricity sector should have achieved it by at least a decade earlier because of the time taken to change processes and build infrastructure.

A shift to renewables brings other benefits. Wind, solar photovoltaics, biomass, smallscale hydro and deep geothermal (provided the last is found viable in Saskatchewan) can be effectively run on a community scale and hence provide opportunities for a degree of local democratic control. Renewables in general offer more good jobs per unit of investment than does the fossil industry. These jobs will typically require minimal commuting and so enable full involvement in family and community life.

### Green Party of Saskatchewan:

*from Victor Lau (party leader):*

Sask Green Party commits to 40% green power in 4 years. We would seek to diversify into all these sources of energy. SaskPower would be converted into a Crown Co-op and directed by its members to move towards renewables in a rapid transition.

[Mr Lau and other GPS candidates have also spoken publicly in favour of introducing a feed-in tariff to encourage local, typically community- or individually-owned green generation.]

*CJS assessment:*

It is not clear how this ambitious goal would be achieved. If large hydro is included, green power in Saskatchewan currently amounts to about 25% of the total. With a still-increasing

overall demand, an increase to 40% if provided exclusively by wind power (the cheapest option) would require an additional 1500MW of capacity, costing about \$3 billion. While this may be achievable, the means of funding should be made clear. Presumably, once a feed-in tariff is in place, this power would be mostly generated by community initiatives – which will need to establish themselves, find appropriate locations, carry out the necessary research on local wind speeds, solar intensities, river flowrates, etc, develop detailed plans, obtain planning permission, negotiate grid access and secure funding. For, say, 50 communities to each set up a 30MW wind farm (or a 65MW solar farm, or small hydro projects totalling 20MW, or a 15MW biomass power station - each of which would generate about the same amount of energy over a year) within a four-year timescale is a massive challenge, and will require considerable positive assistance from government.

Likewise, it is not clear how the Crown Coop proposal would work. Unless the charter of SaskPower is clearly defined to prioritize clean energy options, how would the GPS guarantee that the members would indeed “move it towards renewables in rapid transition”?

The feed-in tariff proposal is a positive one, provided that the details are considered carefully. FiTs have facilitated rapid growth in renewables development throughout the world, by enabling predictability of annual income for the generator. By enabling community or cooperative development, they have enabled local community development and wealth creation, and facilitated a more democratic, people-centred model of power generation.

**8/10 B**

## Liberal Party of Saskatchewan:

*from Kevin Ber (candidate, Saskatoon Stonebridge Dakota):*

Biomass might not be as large as the others, but the others need to be the main source for non base energy in the province, geothermal heat should be mandatory with subsidy support for new large home builds. Wind and solar should be between 30-70% of the provinces power over the next 10 years.

*from platform 2016:*

- Saskatchewan has the highest per capita greenhouse gas emissions in Canada, at a time when our province faces replacing large amounts of power generation in the near future.
- Shifting to renewable energy systems offers us a way to tap into our vast supply of sustainable resources and reduce our environmental impact while creating a long-term, secure energy supply.
- We will mandate SaskPower to purchase locally produced, renewable energy at a fair market rate, and provide low interest loan guarantees for small businesses and farms to build wind or solar generation facilities on their property.
- We will offer an income tax rebate to homeowners covering up to 25% of the cost of installing solar or wind generation facilities, along with suitable electrical storage devices, over the span of two years (12.5% the first year and 12.5% the second year)
- We will enter into consultations with First Nations and Métis Federation to encourage communities on sovereign land to become energy self-sufficient through solar and wind generation and allow them to sell excess renewable power into the provincial grid.
- This new resource revenue stream can provide First Nations governments an opportunity to improve their quality of life and create skilled jobs for individuals in their communities.

*CJS assessment:*

All three of the platform proposals here (purchasing mandate plus low interest loan guarantees, household green energy subsidy, Indigenous power generation) are positive and to be welcomed. However, no specifics are offered regarding the targets to be pursued.

Furthermore, it is not clear whether the purchasing mandate amounts to a feed-in tariff (i.e. a guarantee to prioritize it on the grid and to pay a price per kWh which has been announced well in advance).

Mr Ber's target is an ambitious one, and shows a degree of understanding of the challenge facing us (though not necessarily of the difficulties inherent in shifting to 70% wind/solar within ten years). It seems unlikely, however, that his position is fully representative of his party.

**7/10 B**

### New Democratic Party of Saskatchewan:

*from Cathy Sproule (environment spokesperson):*

We will entrench in legislation a requirement for 50% renewable power by 2030, but have publicly committed to aim for 60% renewable power by that date.

*from platform 2016:*

- We will aim for 60% renewable power, with a legislated target of at least 50% renewable power by 2030.
- We will enhance SaskPower's partnership with the First Nations Power Authority and increase opportunities for renewable power co-operatives, farmers, communities and local businesses to benefit from renewable power generation.
- We will extend and enhance the net metering program.
- We will legislate stringent energy efficiency targets: 300 MW by 2020; 450 MW by 2030; and 800 MW by 2050.
- We will establish a Saskatchewan Green Innovation Technology Fund, in consultation with industry.

*CJS assessment:*

All positive initiatives, though a more ambitious 2030 target would be achievable, and a feed-in tariff would be more effective than net metering. The energy efficiency targets are expressed in terms of capacity not needed, rather than actual energy saved, and so do not have a direct relationship to emissions reductions. Indeed, if SaskPower were to use those targets to drive load shifting rather than load reduction, it would be inappropriate to describe them as "energy efficiency targets".

**6/10 C**

### Saskatchewan Party:

*from Jamie Brandrick (Saskatoon Nutana candidate):*

Premier Brad Wall announced with SaskPower that by 2030 our electrical generation capacity will come from 50 percent renewables. This is double the current amount that comes from renewable energy. This new generation will be a mix of wind, solar, hydro biomass and geothermal as you suggest.

I agree with the target set out by SaskPower and the Premier of 50 percent renewables by 2030.

*from platform 2016:*

Continue to work towards the target of having 50 per cent of Saskatchewan's power generation capacity produced by renewable power by 2030.

A Saskatchewan Party government will extend a program that assists homeowners to install renewable power for another two years. The province's net-metering program allows residential and business customers to generate their own grid-connected power using

renewable power. The extended program will focus exclusively on self-generated solar power, and will continue to:

- Provide a rebate of 20% on the installation costs of solar power, up to a maximum of \$20,000.
- Allow net-metering customers to retain credits for the excess power they generate for a period of 12 months.

Extending the net-metering program is one part of the Saskatchewan Party's plan to achieve a target of 50% renewable power generation capacity in Saskatchewan by 2030.

*CJS assessment:*

The SaskPower announcement amounts to a substantial improvement on previous policy. (50% of capacity, with the anticipated generation mix, amounts to about 43% of energy generated.) It is still probably the least ambitious approach of any of the parties. Extension of net metering for a mere 2 years does not offer stability to the renewables industry. And a feed-in tariff would be a significant improvement on net metering.

**5/10 C**

### 3. Coal phase-out

Do you favour the rapid phase-out of coal-fired power in Saskatchewan? If yes, what timescale do you favour?

#### General comments from CJS

Coal-fired power is a major source of greenhouse gas emissions. An exit from coal would enable a significant reduction in emissions – especially if the shift is to renewables rather than gas.

Coal-fired power is also of necessity a highly centralised technology, limiting true democratic control and providing jobs only in a few locations.

#### Green Party of Saskatchewan:

*from Victor Lau (party leader):*

Yes. We know Alberta is shutting its coal plants in ten years time. Can Sask do the same? The Sask Green Party government intends to devise a plan by consulting with all stakeholders on how to move forward on closures and just transitions for the workers involved and the affected communities.

*CJS assessment:*

The sentiment is good – and it is important to enable “just transitions for the workers involved and the affected communities”. (Fortunately, the far south of the province, where both coal mines and power stations are located, also has excellent wind and solar characteristics, as well as possibilities in hydro and biomass.) However, the phrasing is tentative, suggesting that the GPS has not fully considered this option.

**9/10 A**

#### Liberal Party of Saskatchewan:

*from Kevin Ber (candidate, Saskatoon Stonebridge Dakota):*

Yes, coal is too dirty, too dangerous. Hydro is a great option for its replacement, but coal should be phased out as soon as it is feasible.

*CJS assessment:*

Good – but no indication as to what “feasible” means in this context

**7/10 B**

#### New Democratic Party of Saskatchewan:

*from Cathy Sproule (environment spokesperson):*

Federal regulations require a phase out of conventional coal generation. Despite the considerable amounts of public money poured into it, carbon capture technology has not proven to be technologically, economically or environmentally viable. Based on all of the information that is available, we would not proceed with further public spending on carbon capture technology. We would prioritize investments in clean, renewable power instead.

*CJS assessment:*

A healthy policy, but no indication as to the schedule for an exit for coal. For example, would the NDP be prepared to close coal-fired stations before their retirement date? (For Shand, this is as late as 2038.) More detail needed.

**5/10 C**

Saskatchewan Party:

*from Jamie Brandrick (Saskatoon Nutana candidate):*

No.

*CJS assessment:*

While the SaskParty hopes to reduce emissions from coal-fired power by using carbon capture and storage (CCS) technology, this has proven to be expensive at Boundary Dam 3, and so would divert finance away from cheaper, better-established, lower-emissions renewables which could offer a more reliable alternative to coal.

**1/10 F**

## 4. Green jobs and retraining

In pursuing a just transition to renewable energy, how would you:

- a. Ensure affected workers have opportunities for retraining, relocation & re-employment?
- b. Ensure new green jobs are good jobs?
- c. Encourage investments in public transit, green building, renewable energy and other green technologies?

### General comments from CJS

Renewables and energy efficiency offer more jobs per unit of investment than those in fossil energy.

### Green Party of Saskatchewan:

*from Victor Lau (party leader):*

(a) Our Sask Green Party is eliminating tuition and would offer transitional funding for affected workers to go get retraining. Perhaps some, if not all, would go into working in the renewable energy sector.

(b) Green Power jobs are well-paid and help lower emissions. The hemp industry could blossom here hiring many hundreds of workers to produce textiles, bioplastics and even food. Thirdly, restoration jobs – these workers will be hired to fix houses to be more energy efficient, restore and expand wetlands, remove toxic asbestos from homes, workplaces and waterpipes, generally help restore our environment.

(c) Yes of course

*from platform 2016:*

By promoting sustainability, we also produce many good jobs along the way. Our Saskatchewan Green Party government would:

- *Green the Grid* – We will add lots of additional renewable energy to our power system by enabling local citizens and businesses to sell surplus power they produce to SaskPower.

- *Renewable Technology* – Our government will position Saskatchewan to take full advantage of the world's desire for green energy by fostering local industries in conservation and in solar, wind, geothermal energy.

- Our government believes in creating jobs that do good in our world – By funding asbestos removal, site remediation, home repairs, provincial parks and pasture lands protection, we will ensure prosperity and wellbeing for generations to come.

*CJS assessment:*

It appears that the GPS understands the possibilities. But one significant thing which is missing is a plan for retraining, including support for new courses at Saskatchewan Polytechnic, technical colleges and the province's universities.

9/10 A

### Liberal Party of Saskatchewan:

*from Kevin Ber (candidate, Saskatoon Stonebridge Dakota):*

Simply building and encouraging green energy will create more jobs than just coal. Most of the skills are easily transferable from coal to hydro. The mining jobs will also transfer to other mining industries. But if timed with the resurgence of oil and gas, it would not be a significant

issue. Changing building codes and bringing green energy solutions will increase investment. But tax incentives are key.

*CJS assessment:*

Valid points – but some investment in retraining is necessary.

**6/10 C**

### New Democratic Party of Saskatchewan:

*from Cathy Sproule (environment spokesperson):*

We will invest in education and training, support local research and development, review and improve the building code, establish a Green Innovation Technology Fund, and boost clean, renewable power.

*from platform 2016:*

We will support local green innovation, through SaskPower procurement and through a Saskatchewan Green Innovation Technology Fund, established in consultation with industry.

*CJS assessment:*

A generally good approach.

**9/10 A**

### Saskatchewan Party:

*from Jamie Brandrick (Saskatoon Nutana candidate):*

(a) With population and industrial increases in power demand, we don't foresee closure of any other plants coinciding with our expansion of renewables. This would mean that the workforce may expand.

(b) SaskPower has been named one of the top employers in Saskatchewan and our expansion of renewable energy will create good green jobs.

(c) The Saskatchewan Party has a strong record of investment in green energy and technologies. SaskPower's investment in renewable energy will be about \$1.5 billion. We have also invested in Carbon Capture and Sequestration at Boundary Dam. This is a first of its kind technology and has captured over 674,000 tonnes of CO<sub>2</sub> since coming online. While there have been some issues as with any technology that is a first, we are on target to capture 800,000 tonnes of CO<sub>2</sub> this year.

*CJS assessment:*

There is no commitment to transition here – only to addition of some renewables. You do not move to a sustainable economy simply by adding some greentech on top of the old polluting options. And the opening claim in (c) is patently untrue – there has been no meaningful investment in renewables or efficiency. Boundary Dam 3, by enabling enhanced oil production, actually increases the total amount of carbon dioxide emitted and so should not be considered to be “green energy” even if it was fully operational and even if it had not cost nearly \$1.5 billion for one small power station.

**2/10 F**

## 5. Home & business energy efficiency

Until a few years ago, provincial subsidies were available to enable home energy efficiency improvements. Would you reinstate these? If yes, in full or in part? Are there other options to enable building energy efficiency which you would consider?

### General comments from CJS

The EnerGuide for Homes programme, which was closed down by the SaskParty government in 2013, was an important driver of improved energy efficiency. Questions could, however, be raised as to whether there are more efficient ways to achieve this: for example with municipally-run schemes funded through Local Improvement Charges over a period of multiple years.

### Green Party of Saskatchewan:

*from Victor Lau (party leader):*

We would work using a participatory democracy process to involve citizens in designing a programme that will work for both home-owners and businesses. We also want to chart the progress being made each year in lowering carbon emissions in Saskatchewan.

*CJS assessment:*

This sounds like “something should be done but we haven't thought this one through”.

**4/10 D**

### Liberal Party of Saskatchewan:

*from Kevin Ber (candidate, Saskatoon Stonebridge Dakota):*

Yes in full

*CJS assessment:*

Good – but no thought about “other options”

**7/10 B**

### New Democratic Party of Saskatchewan:

*from Cathy Sproule (environment spokesperson):*

We will renew the EnerGuide for Houses program, to help families make energy-saving improvements to their homes.

We will also review the building code and make appropriate changes to improve energy conservation measures.

*from platform 2016:*

- We will renew the EnerGuide for Houses program, to help families make energy-saving improvements to their homes.

- We will review the building code and make appropriate changes to improve energy conservation.

*but also:*

Cam Broten will deliver more affordable utility rates — for home heating, electricity, telephone and auto insurance — cutting rates for families each year, and matching or surpassing Manitoba's lowest-cost utility bundle by 2020.

*CJS assessment:*

Some definitely positive proposals.

However, the drive to minimise electricity and gas rates will militate against this – when fuel prices are kept low, the impetus to pursue efficiency is dampened. A better approach to fuel poverty is to ensure that all “affordable” and low income housing is brought up to a high standard of energy efficiency through targeted programmes. The average Saskatchewan household currently pays slightly more annually than the average German household for electricity, despite the much higher unit price for electricity in Germany. Efficiency measures can achieve very substantial cost reductions and, unlike price cuts, they are permanent and enduring.

**7/10 B**

**Saskatchewan Party:**

*from Jamie Brandrick (Saskatoon Nutana candidate):*

The Saskatchewan Party government is committed to promoting and educating energy efficiency in Saskatchewan. For example, Energy Star furnaces and boilers are exempt from Provincial Sales Tax. There is also an Energy Star Loan program to help people move to more efficient furnaces. The Energuide program that was completed in 2013 provided over \$60.5 million in grants to over 53,900 homes in Saskatchewan.

*CJS assessment:*

No plan to reinstate EnerGuide for Homes, nor devise anything better. The concessions to energy efficiency here are small.

**2/10 F**

## 6. Venting, flaring and leaks

About one-fifth of Saskatchewan's greenhouse gas emissions are from venting, flaring and methane leaks in oil and gas extraction, transport and processing. What measures would you support to reduce these emissions?

### General comments from CJS

These emissions, collectively described as “fugitive”, account for nearly one-fifth of Saskatchewan's total. Jurisdictions as diverse as Norway, Alberta and North Dakota have paid more attention to this problem than Saskatchewan. There are basically 3 options available to minimise venting and flaring – pipe the vented methane into the gas grid, use it to generate power locally, or pump it back underground. Leaks are more difficult, and are likely to increase as the use of high-pressure fracking increases. Industry could be encouraged to reduce all of these fugitive emissions through inclusion of methane in carbon pricing schemes and through thorough monitoring.

### Green Party of Saskatchewan:

*from Victor Lau (party leader):*

We would work with stakeholders in determining how we can lower these releases and ultimately eliminate them.

*The following, from the 2016 party platform, is peripherally relevant in that it could give a little more negotiating power to landowners:*

Surface Rights

- Replace the arbitration board with a fair compensation board
- Ensure landowners and tenants have a major say in where and when oil and gas companies can drill
- Set up an advocacy office for landowners to help deal with any potential problems that may arise
- Ensure all drilling equipment is sterilized before use on farm property (with the cost paid by the company)

*CJS assessment:*

The GPS has clearly not considered the problem of fugitive releases.

**3/10 D**

### Liberal Party of Saskatchewan:

*from Kevin Ber (candidate, Saskatoon Stonebridge Dakota):*

Mandatory gas reduction technology very similar to the laws they have in BC

*CJS assessment:*

While BC has fairly detailed venting and flaring reduction guidelines, the ability to address leakage in that province is in severe doubt, with official figures for fugitive emissions challenged by expert opinion.

**7/10B**

## New Democratic Party of Saskatchewan:

*from Cathy Sproule (environment spokesperson):*

We will reverse the Sask Party's changes to environmental regulation, which largely allow industry to police itself. We will establish an appropriate regulatory framework on greenhouse gas emissions, including the establishment of a Green Innovation Technology Fund. We will reverse the Sask. Party's cuts to environmental protection. We will require stringent triple bottom-line assessments of development projects. We will strengthen environmental impact assessment legislation to ensure cumulative environmental impacts on a watershed or eco-region are properly assessed and that protective action is taken. And we will establish an independent energy regulator with a mandate to oversee and regulate development of Saskatchewan's energy resources.

*The following, from the 2016 party platform, is peripherally relevant in that it would enable stronger regulation of future developments:*

We will reverse the Sask. Party's changes, which allow industry to police itself.

We will require stringent triple bottomline assessments of development projects.

*CJS assessment:*

The call for a return to independent regulation is very welcome, as is the emphasis on cumulative impacts. However, the lack of specifics on how to reduce fugitive emissions is concerning.

**5/10 C**

## Saskatchewan Party:

*from Jamie Brandrick (Saskatoon Nutana candidate):*

If re-elected we will continue to work with industry and environmental stakeholders on how to best address this issue.

*CJS assessment:*

While the Wall government did bring in regulations to cover this problem, they are weak, and unlikely to achieve much of a reduction under current economic circumstances. It is clear from Mr Brandrick's response that this is not a matter of concern to his party.

**1/10 F**

## 7. Bitumen pipelines

Which of the current major bitumen pipeline proposals do you support, and which do you oppose?: Kinder Morgan TransMountain / Enbridge Northern Gateway / TransCanada Energy East / other (please specify). Feel free to give reasons.

### General comments from CJS

Any new pipeline will enable the expansion of bitumen mining in northern Alberta – thus adding to a major and growing driver of Canada’s emissions. According to a landmark paper published by Stephane McGlade and Paul Ekins in Nature in 2015:January, 85% of the known and claimed bitumen reserves (as of 2010) need to be kept in the ground if we are to keep global temperature rise below 2degC. (The Paris Agreement commits parties to keep it “well below 2°C” and pursue efforts to keep it below 1.5°C.) Further arithmetic using McGlade and Ekins' figures indicates that production between now and 2050 should average little more than 0.3 million barrels a day. Current production is in excess of 2 million barrels a day.

### Green Party of Saskatchewan:

*from Victor Lau (party leader):*

As a Green Party we want to move into the green economy in the short term. We would consult Saskatchewan people on what they would like to happen to these pipelines, plus we would do stress tests on them to then weigh the costs and benefits for Saskatchewan including the climate impacts.

*CJS assessment:*

While we welcome the desire to move rapidly into the green economy, this wording is unclear – what does he mean by “stress tests”? There is no sense here that Mr Lau understands the indirect climate impact of the pipelines which have been proposed.

**3/10 D**

### Liberal Party of Saskatchewan:

*from Kevin Ber (candidate, Saskatoon Stonebridge Dakota):*

The Liberal plan includes a Saskatchewan north south pipeline, as well as the transporting oil by pipeline to the port of Churchill. This gets most of the oil off the rails and into the safer transportation of pipeline.

Energy East is also a good option. But does little to create Saskatchewan jobs.

*from platform 2016:*

We will begin the consultation process with all stakeholders to:

- Develop a pipeline system to run the entire province from south to north, owned by the First Nations and Métis Federation. The infrastructure required will create jobs in Saskatchewan when they are needed most to keep our economy growing.
- Promote partnerships with private industry to construct additional refineries, resulting in thousands of new, full time, permanent jobs.
- Connect the new refineries to the pipeline that will cross through Manitoba to the Port of Churchill, which is now under First Nations ownership.

*CJS assessment:*

While it makes sense to refine conventional oil in Saskatchewan instead of exporting it to the coast, the proposal for new pipelines – especially across the bare rock and muskeg of the Shield – raises concerns. Given the location, this is essentially another proposal for a tarsands pipeline.

**2/10 F**

New Democratic Party of Saskatchewan:

*from Cathy Sproule (environment spokesperson):*

We do not support the Northern Gateway pipeline. We support other pipeline projects, because we need to get our resources to market. We have long supported pipelines, because they are safer and more environmentally friendly than trains or trucks when it comes to transporting oil. We want all development projects to undergo a thorough regulatory review.

*from platform 2016:*

We will work with the Government of Alberta to engage in productive, drama-free discussions with other jurisdictions to achieve market access for Saskatchewan's natural resources, including through responsible pipeline development. And we will explore opportunities for more value-added jobs in oil, gas, forestry and agriculture.

*CJS assessment:*

The NDP fails to recognise the seriousness of the contribution which new pipelines could add to climate change.

**2/10 F**

Saskatchewan Party:

*from Jamie Brandrick (Saskatoon Nutana candidate):*

support / support / support

The Saskatchewan Party feels that it is important to expand pipeline capacity and opportunities to increase Saskatchewan jobs and get Western Canadian Crude to tidewater.

*from platform 2016 (though only peripherally relevant to this question):*

The Government of Saskatchewan provided \$2 million in funding support for the Petroleum Technology Research Centre in the 2015-16 Budget. The PTRC was established to foster research and development into technologies that reduce the environmental footprint of the oil and gas sector as well as technologies that increase investment and resource recovery in Saskatchewan.

*CJS assessment:*

This policy totally disregards the substantially increased greenhouse gas emissions – and hence seriously enhanced climate change impacts - which will result from increased bitumen production if any of these pipelines is built.

**0/10 F**

## 8. Nuclear expansion

Do you support: Expansion of uranium mining in Saskatchewan? / Further processing of uranium in Saskatchewan? / New nuclear reactors in Saskatchewan? / Development of a repository for nuclear waste in Saskatchewan?

### General comments from CJS

CJS rejects expansion of the nuclear industry as a false solution to the climate crisis. Even if it were not for the industry's frequently rehearsed problems (increased weapons proliferation risk, lack of proven methodology for dealing longterm with high level nuclear waste, risk of Fukushima-scale accidents, known impacts on health and ecosystems, etc), the high cost and long lead times would render the nuclear industry too slow and ineffective to replace fossil generation on the scale which would be required.

Nuclear power is also of necessity a highly centralised technology, limiting true democratic control and providing jobs only in a few locations. Its need for intense security and surveillance also reduces the scope for democratic control.

### Green Party of Saskatchewan:

*from Victor Lau (party leader):*

The Sask Green Party is totally opposed to nuclear power and all uranium mining. Our government would move to ban nuclear power, ban nuclear waste and phase out all uranium mining.

*CJS assessment:*

We are fully in agreement with the GPS on this point

**10/10 A**

### Liberal Party of Saskatchewan:

*from Kevin Ber (candidate, Saskatoon Stonebridge Dakota):*

Mining: Yes, this is necessary to reduce global coal usage. Without Saskatchewan uranium the Chinese, Indian and Japanese nuclear projects would not be as cost effective.

Processing: I have no opinion on this issue. It is up to municipalities to decide if they want to process or not.

Reactors: Yes to medical /No to energy, we do not have the urban density to justify a nuclear reactor.

Waste repository: No

*CJS assessment:*

Mr Ber appears to be unaware that wind and solar power are growing much faster than nuclear in China and India, that Japan now has no plans for nuclear expansion (and strong public opposition to post-Fukushima re-opening of any of the country's nuclear plants), and that the trend in Europe and the US is towards closing reactors rather than opening new ones.

**6/10 C**

### New Democratic Party of Saskatchewan:

*from Cathy Sproule (environment spokesperson):*

We support uranium mining. We do not support the transport of nuclear waste back to

Saskatchewan or the storage of nuclear waste in our province.

*CJS assessment:*

Support for uranium mining buttresses nuclear power worldwide. We note that no mention is made in this statement of nuclear power stations – is this because the NDP is divided on the issue?

**5/10 C**

Saskatchewan Party:

*from Jamie Brandrick (Saskatoon Nutana candidate):*

yes / yes / no / no

*from platform 2016:*

Promoted access to China and India for Saskatchewan uranium. Under the new Canada-India Nuclear Cooperation Agreement, India received its first uranium shipment in December 2015 under a five year contract to supply 7.1 million pounds of uranium concentrate to India. The Sylvia Fedoruk Centre was launched in 2011, with a provincial government commitment of \$30 million over seven years for nuclear research focused on nuclear medicine, material science, nuclear safety and small/smart reactor technology.

*CJS assessment:*

We welcome Mr Brandrick's opposition to reactors and waste disposal in the province – which, however, is not in line with the stances taken by his leader over recent years. While Mr Brandrick rates 4/10, we find it necessary to give his party:

**0/10 F**

## 9. Carbon capture and storage / “clean” coal

Following the experience of the Boundary Dam 3 refit, do you support further development of carbon capture and storage? Feel free to give reasons

### General comments from CJS

- CCS reduces direct emissions from coal-fired power stations. However;
- emissions still remain substantially higher than those from renewables
  - by enabling enhanced oil recovery, the technology results in substantially higher ultimate emissions when the extra oil is burnt
  - the cost of the technology makes it undesirable
  - other emissions (heavy metals, particulates, etc) remain unreduced

### Green Party of Saskatchewan:

*from Victor Lau (party leader):*

No. Carbon capture has been shown to be a complete failure. The Sask Green Party is the only party willing to end funding to carbon capture if we form government after April 4<sup>th</sup>.

*CJS assessment:*

We agree.

**10/10 A**

### Liberal Party of Saskatchewan:

*from Kevin Ber (candidate, Saskatoon Stonebridge Dakota):*

Absolutely not. Elimination of coal, not reinvestment into it is where the world needs to go.

*CJS assessment:*

We agree.

**10/10 A**

### New Democratic Party of Saskatchewan:

*from Cathy Sproule (environment spokesperson):*

Despite the considerable amounts of public money poured into it, carbon capture technology has not proven to be technologically, economically or environmentally viable. Based on all of the information that is available, we would not proceed with further public spending on carbon capture technology. We would prioritize investments in clean, renewable power instead.

*CJS assessment:*

We agree.

**10/10 A**

### Saskatchewan Party:

*from Jamie Brandrick (Saskatoon Nutana candidate):*

Yes.

A decision hasn't been made on Boundary Dam 4 and 5 but we feel this technology has world-wide application to reduce emissions from coal fired generation.

*from platform 2016:*

SaskPower has invested over \$1.2 billion in the \$1.46 billion Carbon Capture & Sequestration facility at Boundary Dam 3. This is the world's first commercial post-combustion CCS project on a coal-fired plant. The one-of-a-kind project will reduce emissions by 90%, which is equivalent to taking 250,000 cars off the road annually.

*CJS assessment:*

This is greenwashing. See general comments above. There are much cheaper, cleaner and more reliable ways to reduce the electricity sector's emissions.

**1/10 F**

## 10. Electric vehicles

(a) Do you support a transition to electric vehicles on our roads? (b) If yes, how would you encourage it as an MLA? (c) What other measures would you favour to reduce greenhouse gas emissions from the transport sector?

### General comments from CJS

Electric vehicles represent the only realistic method of decarbonizing transport – provided that electrical generation makes the transition from fossil fuels to renewables. A shift to electric vehicles will require steady improvements in battery technology, especially in the achievable range, together with reductions in cost. It also requires new infrastructure – with fast charging stations established throughout the country.

Transport energy policy is complex – answers to part (c) could mention a shift to public transit (both road and rail), urban development of cycling, changes in planning policy to enable reduction of journey length, and encouragement of more fuel-efficient (mostly smaller) vehicles.

### Green Party of Saskatchewan:

*from Victor Lau (party leader):*

(a) Yes, definitely!

(b) Buy a Tesla electric vehicle or Chevrolet Volt and showcase it to the public. As well, we would work with lobby groups and SUMA/SARM to introduce electric charging stations all over Saskatchewan. Our Sask Green Party government would also invite Elon Musk and his Tesla company to sign partnerships with our province to test his home/business storage batteries and other new technologies right here in our colder weather.

(c) We need to create a provincial transportation strategy that will also lower carbon emissions.

*from platform 2016:*

- A Saskatchewan Green Party government would also launch a provincial agricultural transportation strategy with input from all farm stakeholders including farmers.

- STC's range of service would be expanded to provide commuter service to bedroom communities of the major cities, including Lumsden, Emerald Park, White City, Pilot Butte, Balgonie, Martensville, Warman, Osler, Hague, Langham and Meath Park.

*CJS assessment:*

Some progress has been made towards a sustainable GPS transport policy.

**8/10 B**

### Liberal Party of Saskatchewan:

*from Kevin Ber (candidate, Saskatoon Stonebridge Dakota):*

Yes. Tax incentives, and setting provincial goals and education programs.

Natural gas conversion is a good option. But this is the most difficult problem in the transport sector.

*CJS assessment:*

Limited understanding of transport policy

**5/10 C**

## New Democratic Party of Saskatchewan:

*from Cathy Sproule (environment spokesperson):*

The move toward increased innovation around electric vehicles is exciting, but it underscores the need for us to make our electricity sector more environmentally friendly.

*CJS assessment:*

Not a lot of detail here, but some understanding of the issue.

**5/10 C**

## Saskatchewan Party:

*from Jamie Brandrick (Saskatoon Nutana candidate):*

(a) Yes.

(b) A Saskatchewan Party government would support people who choose to transition to electric vehicles while realizing that electric vehicles would not suit the transportation need of all Saskatchewan people.

(c) We believe a pipeline for our oil reserves will help to reduce emissions in transport. Currently, a large amount of oil is transported by rail, where emissions are higher than in the use of pipelines.

*CJS assessment:*

Some beginnings of understanding here.

The claim that oil by rail is less energy efficient than oil by pipeline is indeed true, but the difference is insignificant compared to the extra emissions created as a result of the increased volume which could be transported by pipeline (and hence the increased volume which could be produced). (The Energy East pipeline could carry 1.1 million barrels per day. In 2015, about 0.2 million barrels per day were carried by train, according to the Canadian Association of Petroleum Producers.)

**3/10 D**

## 11. Indigenous rights and resource development

Should the United Nations Declaration on the Rights of Indigenous Peoples be fully recognised in Saskatchewan law? If yes, how do you see the implications for resource development of Article 19, which requires free, prior and informed consent from Indigenous peoples before implementing measures which might affect them?

### General comments from CJS

Article 19 reads:

“States shall consult and cooperate in good faith with the indigenous peoples concerned through their own representative institutions in order to obtain their free, prior and informed consent before adopting and implementing legislative or administrative measures that may affect them.”

Acceptance of Article 19 means acceptance of the Indigenous right to a veto on development (by the people, through traditional forms of governance and decision-making, and not just by leaders elected under Indian Act procedures).

### Green Party of Saskatchewan:

*from Victor Lau (party leader):*

Yes.

Our Sask Green Party government would respect that right and work together in partnership and cooperation with aboriginal leadership to build good jobs for their people and share our resource prosperity via the guaranteed liveable income.

*CJS assessment:*

**7/10 B**

### Liberal Party of Saskatchewan:

*from Kevin Ber (candidate, Saskatoon Stonebridge Dakota):*

It is up to what the first nations want. Conciliation and consultation is the proper path. But it is not a provincial issue to be recognized by law. Due to the complex nature of the law in regards to first nations issues it would be difficult to implement as a law. It would require further examination to see if it even possible.

That [free, prior and informed consent] should be done regardless of the UN declaration.

*CJS assessment:*

Unclear as to what implementation of the principle would mean – for example for his party’s proposed pipeline across the northern muskeg.

**6/10 C**

### New Democratic Party of Saskatchewan:

*from Cathy Sproule (environment spokesperson):*

We will formally endorse the United Nations Declaration on the Rights of Indigenous Peoples. We have a duty to consult with Indigenous communities, and we need to build a nation-to-nation relationship to ensure that we have environmentally, fiscally, and socially responsible projects.

*CJS assessment:*

**7/10 B**

Saskatchewan Party:

*from Jamie Brandrick (Saskatoon Nutana candidate):*

We feel that the Saskatchewan government, no matter which party forms it, has the responsibility to form our own laws and shouldn't be bound by the United Nations.

*CJS assessment:*

This demonstrates a failure to understand the rights of Indigenous peoples, and of the role of the United Nations.

**0/10 F**

## 12. Understanding of climate justice

What does the expression “climate justice” mean to you?

### General comments from CJS

A comprehensive definition of climate justice should include the rights of vulnerable people impacted by climate change today, future generations as climate change intensifies, severe weakening of biodiversity and of the ecological systems on which our species depends, avoidance of societal collapse worldwide, and an analysis which recognises the role of corporate interests in fuelling the crisis.

Some unavoidable implications of this definition are (i) recognition of and respect for the inherent rights of Indigenous peoples in their relationship to the land, water, air and local ecosystems, (ii) advocacy for a rapid and just transition to non-fossil options, with the rights of workers protected as they move into the new economy, (iii) compensation for communities worldwide which are impacted by the effects of climate change, and (iv) support for low-income communities worldwide to enable them to transition to a renewables-based economy.

### Green Party of Saskatchewan:

*from Victor Lau (party leader):*

It means protecting our environment for future generations.

*CJS assessment:*

**5/10 C**

### Liberal Party of Saskatchewan:

*from Kevin Ber (candidate, Saskatoon Stonebridge Dakota):*

As wikipedia states,:

As a form of environmental justice. Climate justice is the fair treatment of all people and freedom from discrimination with the creation of policies and projects that address climate change and the systems that create climate change and perpetuate discrimination.”

This is the best definition that I follow.

*CJS assessment:*

Not a bad summary – even if it’s not his own...

**8/10 B**

### New Democratic Party of Saskatchewan:

*from Cathy Sproule (environment spokesperson):*

Climate justice is the recognition that we need to make great strides in moving toward a sustainable world, ensuring that we leave a healthy planet to future generations, and protect the most vulnerable people against the effects of climate change.

*CJS assessment:*

**8/10 B**

Saskatchewan Party:

*from Jamie Brandrick (Saskatoon Nutana candidate):*

Climate Justice can be interpreted many different ways by different people. Our government has worked hard to address climate change issues by investing in carbon capture technology and setting targets for renewable energy. Given 1,000 coal plants are currently in the planning or construction phase across the world, our technology will be solution world-wide to curbing emissions. This is a significant contribution to what some consider climate justice.

*CJS assessment:*

**0/10 F**