

Brett Dolter  
Assistant Professor  
Department of Economics  
University of Regina

October 24, 2018

Mayor Fougere and City Councillors,

My name is Brett Dolter and I am an Assistant Professor in the Department of Economics at the University of Regina. My research and teaching are focused on energy and climate change policy.

It is my pleasure to speak in favour of the motion Make Regina a Renewable City.

This motion provides an opportunity for Regina to demonstrate leadership. Tonight Mayor and Council, you have an opportunity to chart a visionary path towards a healthier and more sustainable city.

What will this look like?

I want to encourage each of you to imagine a city that generates more clean energy that it uses. In this city solar panels generate electricity on rooftops, solar thermal systems provide hot water and heat, wind turbines located strategically outside of city limits send electrons into the city, and geothermal energy provides heat for institutions like the University of Regina. Regina can be this city. We can use our incredible renewable resources to power our city.

If you choose to support the motion tonight, then I would like to also encourage you to consider what it means to be a Renewable City beyond the generation side. We know that *negawatts* – the energy saved that we don't have to generate – can be as important as megawatts of electricity. Regina has been a pathbreaking leader in energy conservation. The Regina Conservation House was built in 1977 and only required 20% of the energy of the typical home of the era. This house was highly insulated and used solar energy for heat. It did not require a furnace.

The Regina Conservation House actually became the model for a style of homebuilding the Germans call *Passivhaus*. Forty years later and *Passivhaus* design is now one of the most desirable forms of low-energy housing. And the idea was born here in this city. As we embark upon realizing the 2050 vision I would ask you to consider, how can we engage our building industry to imagine the next generation of low-energy building types?

Becoming a renewable city can also mean meeting **all** of our energy needs using renewable energy, including home heating and transportation. Imagine a city where the familiar smoke of our furnaces was gone. Where natural gas was no longer needed for heat because we use electric ground source heat pumps. In Montreal they are now looking at using back alleyways to lay out the ground source heat pump coils for whole city blocks. Can we transform our alleyways in the same way?

A Renewable City strategy might also consider electric vehicles. These vehicles can be charged using clean electricity and their batteries would provide energy storage. Can Regina lead the way in the development of cold climate electric vehicle technology? I think we can.

If you choose bold leadership tonight then I encourage you to think about how zoning and city planning might work to ensure a Renewable City. Can we ensure all new developments are built oriented to the southern sun? Can we build neighbourhoods where active mobility like walking and cycling is safe and convenient? Neighbourhoods where people are healthier and happier? I believe we can, and I believe that once we begin to look at what is needed we will find that the same design thinking outlined in Regina's Official Community Plan will help make a Renewable City possible.

Tonight you are being asked to approve a motion to make Regina a 100% Renewable City. In my mind this is the beginning of a conversation in Regina. I'd like to offer my help in continuing this conversation. In the coming months I will launch a survey of Regina residents to gauge their views on a number of different initiatives that could form part of a Renewable City strategy. It would be my pleasure to work with Council and administration to ensure the survey helps address your needs and interests.

I also plan on organizing in-person dialogues where Regina residents can work together to identify a vision for Regina's Energy Future.

Lastly, I will be conducting some economic modelling to understand the costs and benefits of becoming a Renewable City. This work would profit from your guidance and the technical skill of city administration. I hope that we can work together to continue this conversation on achieving a 100% Renewable City by 2050.

Thank you for considering my comments.

Sincerely,

Brett Dolter