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If you have questions, please contact the Chair of the Resolutions Committee:
Eleanor Scarth – resolutions@fcfdu.org

Amendments are due by March 31, 2015.

Amendment Procedure

After study and discussion, if your Club wishes to propose amendments to the resolutions, please follow the below procedure carefully.

Each resolution has a separate Amendment Form, which must be sent to its designated email:

[Resolution 1 Amendment Form \(.doc\)](#) sent to resolution1@fcfdu.org
[Resolution 2 Amendment Form \(.doc\)](#) sent to resolution2@fcfdu.org

The forms should be completed and returned as Microsoft Word attachments. In order to assist us with organizing the amendments, please remember to save the file **with a name that includes the resolution number and your Club's name**. For example, *Resolution 1 Amendment Oakville.doc*. **No PDF documents can be considered.**

For further information on the amendment process, including proposers responsibilities and the procedure at the Annual General Meeting, please consult relevant pages of the [resolution guidelines here](#).

RESOLUTION 1

Saving Our Pollinators and Our Environment: Moratorium on the Use of Neonicotinoid Pesticides

Proposed by: CFUW Edmonton

RESOLVED, That the Canadian Federation of University Women (CFUW) urge federal, provincial, territorial and municipal governments of Canada to immediately implement a five-year moratorium on the use of the neonicotinoids class of pesticides.

RESOLVED, That CFUW urge the Government of Canada to order the completion of independent scientific studies prior to the lifting of the moratorium.

RESOLVED, That CFUW urge the Government of Canada to make the full results available for public review and comment prior to lifting of any moratorium on the use of the neonicotinoids class of Pesticides.

Please find the amendment form for Resolution 1 [here](#), once completed send to: resolution1@cfdu.org

RELATED POLICIES:

Protecting the health of Canadians by reducing environmental toxins (2009);

BACKGROUND

Introduced and widely used world-wide since 1990 as a seed treatment for corn, soy, canola, wheat, oats, rye, barley, sugar beets, and potatoes, “neonicotinoids are a class of insecticides that damage the central nervous system of insects causing tremors, paralysis, and death at very low doses. Primary neonicotinoid active ingredients are: acetamiprid, clothianidin, dinotefuran, imidacloprid, thiacloprid, sofari, and thiamethoraxam. All are ‘systemic’, being absorbed into treated plants and distributed in the vascular systems. Treating a plant or coating a seed renders parts of the plant-root, plant leaves, stem, flowers, nectar, pollen, and droplets from leaves and stem toxic to insects. Neonicotinoids are persistent in soil and easily transported via air, dust, and water to habitats in or near crop fields.” (1)

The unintended consequences of this pesticide have been highlighted by the risk to beneficial pollinators (especially bees), birds, and other wildlife. Other concerns are its unique persistence in soils and aquatic systems, prophylactic overuse, and questionable efficacy.

Scientists estimate that one-third of all plants and plant products depend on bee pollination for seed and fruit production. The Eco-Report of May 29, 2014, sets Ontario bee losses in 2012 and 2013 at 37.9% and British Columbia at 18-27%, well over the

normal 10-15%. Some places in the Fraser Valley in 2013 report up to 80% losses. In the Health Canada Interim Report of September 26, 2013, the information suggests that clothianidin and thiamethoraxam contributed to many bee mortalities in 2013 in expanding regions of Ontario and Quebec. "Preliminary residue results show that approximately 75% of the dead bee samples had detectable residues of neonicotinoid insecticides used to treat corn and soybean seed. Residues of neonicotinoid insecticides were detected in samples from approximately 80% of the beekeepers for which samples have been analyzed." The report by Health Canada cites PMRA's (Pest Management Regulatory Agency) concludes that current agricultural practices related to the use of neonicotinoid treated corn and soybean seed are not sustainable. (2)

Honey bees are an indicator species as they are tracked but the effect of neonicotinoids on other parts of a healthy agricultural system like bumble bees, butterflies, wasps, leafcutter bees, and dragonflies is unknown. The research of Chensheng Lu at Harvard University "reinforces the conclusion that sub-lethal doses of neonicotinoids are likely the main culprit in Colony Collapse Disorder (CCD). (3) Bees in Newfoundland and Labrador seem to be thriving as there are very low levels of commercial farming. Neonicotinoids affect birds and the aquatic systems upon which they depend. "A single corn kernel coated with neonicotinoid insecticide can kill a song bird. " (4)

Recent research from the Netherlands indicates that "The use of neonicotinoid pesticides in recent decades has been linked to declines in bees and other invertebrate pollinators. Hallmann *et al.* present data showing a correlation between declines in insectivorous farmland bird populations and water concentrations of imidacloprid, a neonicotinoid. "(5)

The widespread use of prophylactic pre-planting insecticide seed treatment occurs whether there is an express need or not (eg. corn, soybean, canola). Dr. Christy Morrissey, a University of Saskatchewan biologist, stated that "Obviously the disadvantage from an environmental perspective is that every single plant is treated whether it needs it or not. So now you have a situation where large tracts of land are basically treated when they may or may not need to be treated." (6)

The Italian Ministry of Health announced in June 2012 that it would continue the suspension of clothianidin and thiamethorax on corn originally imposed in 2009 in response to mass bee kills that clearly resulted from neonicotinoid use. Researchers found no evidence that the suspension caused any economic harm in Italy; corn farmers there have seen no serious pest attacks on untreated seed crops and have maintained their yields. (7)

The European Food Safety Authority agrees. They identified a number of critical areas of concern with neonicotinoids. There was "a high risk to bees, birds, mammals, aquatic organisms and soil-dwelling organisms ... (that) could not be excluded on the basis of the available data. Given the importance of bees in the ecosystem and the food chain

and given the multiple services they provide to humans, their protection is essential.” Consequently, in December 2013 the European Union suspended the use of neonicotinoid pesticides for two years. (8)

The National Farmers’ Union advocates for agricultural practices that are economically, socially, and environmentally sustainable. They recommend that Health Canada and the PMRA take a precautionary approach rather than a risk management stance, and implement a 5 year moratorium on the use of neonicotinoids in seed treatment of field crops. (9)

The American Bird Conservancy is urging the U. S. Environmental Protection Agency (EPA) to suspend all applications of neonicotinoids until an independent review is completed and its re-registration review be expanded to include birds, aquatic invertebrates, and other wildlife. (10)

A research paper, “Conclusions of the Worldwide Integrated Assessments on the risks of neonicotinoids and fipronil to biodiversity and ecosystem functioning”, noted in the section on knowledge gaps, “The short and the long-term agronomic benefits provided by neonicotinoids and fipronil are unclear. Given their use rates, the low numbers of published studies evaluating their benefit for yield or their cost-effectiveness is striking, and some recent studies suggest that their use provides no net gain or even a net economic loss on some crops.” It is not currently known what the impact on farming would be if these systemic pesticides were not applied or applied less (though their recent partial withdrawal in the EU provides an opportunity for this to be examined).

Given these knowledge gaps, it is impossible to properly evaluate the full extent of risks associated with the ongoing use of systemic insecticides, but the evidence reviewed in the WIA suggests that while the risks affect many taxa, the benefits have not been clearly demonstrated in the cropping systems where these compounds are most intensively used. (12)

Mounting evidence points to the deleterious effects of neonicotinoids on the environment. A moratorium on their use would demonstrate the use of the precautionary principle – public authorities acting to prevent irreversible harm even when there is not complete scientific certainty.

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RESOLUTION 2

Reducing Climate Change Through the Use of Carbon Taxes

Proposed by CFUW Victoria

RESOLVED, That the Canadian Federation of University Women (CFUW) urge the Government of Canada to:

1. use national, comprehensive and predictable carbon taxes to moderate greenhouse gas emissions;
2. make carbon taxes the centre of a robust Canadian Climate Action Plan; and,
3. encourage the adoption of carbon taxes around the world.

Please find the amendment form for Resolution 2 [here](#), once completed send to: resolution2@cfdu.org

RELATED POLICIES:

Addressing Climate Change: Greenhouse Gas Emissions (CFUW 2009); Addressing Climate Change: Greenhouse Gas (IFUW 2010); Climate Change: Mitigation, Adaptation and the Inclusion of Women (CFUW 2012).

BACKGROUND:

The 2010 CFUW resolution calls on the federal government to recognize the serious problem of climate change and to take all measures to reduce Canada's greenhouse gas (GHG) emissions. The 2012 resolution requests the government to include women in the decision-making process. The current resolution focuses on the specific policy instrument that experts agree would be the most effective single measure in reducing greenhouse gas emissions: carbon taxes.

Canada's problem. The Office of the Auditor General in its Fall 2014 Report from the Commissioner for the Environment and Sustainable Development states in the transcript to the video summary: "Under the Copenhagen Accord, Canada committed to reduce its greenhouse gas emissions to 17% below 2005 levels by 2020... The federal government does not have an overall plan that maps out how Canada will achieve this target."

Why we emit greenhouse gases. We use oil and gas in large quantities. Combustion of fossil fuels produces greenhouse gases (mostly carbon dioxide) which absorb heat in the atmosphere, causing a rise in global temperatures and more unstable weather, among other ills. Users of fossil fuels do not pay for the damage caused by the emissions they produce. In effect the atmosphere is a free dumping area for greenhouse gases and so we are ruining our planet. Sir Nicholas Stern (page 11) states, "...the emission of greenhouse gases is a market failure... That is, prices do not reflect the true cost to society of producing and using goods." Nobel laureate Joseph Stiglitz (Carbon Tax Center citation) states "Not paying the cost of damage to the environment is a subsidy, just as not paying the full cost of workers would be."

By how much should we cut emissions? The scientific consensus so far is that temperatures should not rise more than 2 degrees C above pre-industrial levels, to avoid the worst effects of melting ice and other changes, and that GHGs already emitted will take us well over 1 degree C increase (note: greenhouse gases are close to being cumulative – only a small amount is absorbed from the atmosphere each year, Archer page 17). Canada currently emits 16 tonnes per capita, almost the same as in 1990 (European Commission, Table A1.2); the global average is around 10 tonnes. The International Commission on Climate Change (2014) produces an authoritative assessment report approximately every seven years, using input from thousands of researchers from around the world. The Fifth Assessment Synthesis Report published in November 2014 concludes on page 15: “...to limit warming to below 2 degrees C relative to pre-industrial levels...would require substantial emissions reductions over the next few decades (40% to 70% reduction over 2010 by 2050) and near zero emissions of CO₂ and other long-lived GHGs by the end of the century.”

How carbon taxes can help: Pollution taxes (or user fees) are well recognized by economists as the best way to correct common-property market failure. If the polluter has to pay the full cost of the damage that will be caused then only those projects that are of greatest value in the long run will be worth developing. For example, carbon taxes make fossil fuels more expensive relative to alternatives – higher prices for fossil fuels will encourage people to adopt fuel-efficient cars, live closer to work and services and install non-polluting technologies in industries and at home. Over time we may move to a re-use economy, where goods are repaired or repurposed. By changing relative prices, carbon taxes are a powerful instrument for cutting greenhouse gas emissions. “A carbon tax large enough to internalize the currently expected social damages would be ideal. But even a small one would be an important step..” (Hsu, page 194). Supporters of carbon taxes include Paul Volcker (former chairman of the US Federal Reserve), Michael Bloomberg (former mayor of New York), Nicholas Stern (former chief economist of the World Bank), Joseph Stiglitz (Nobel economist) and other economists from both sides of the political spectrum (all listed on the Carbon Tax Center website). President Barack Obama has labelled climate change a major security issue for the US and has recognized carbon pricing as the most important policy instrument for combating climate change (Friedman, 2014). Various companies, including Shell, Exxon and BP, use an internal price for carbon to reflect probable future carbon taxes (CDP, page 3).

Considering future change is somewhat scary. However, one of the great advantages of carbon taxes is that they do not require us to exercise self restraint or to make resolutions to change our behaviour. Instead “the invisible hand” of the pricing system prompts us to make the appropriate decisions. Consider the changes in our lifestyle over the past 50 years – we have adopted new technologies and abandoned others at an unprecedented rate, not because we were urged to change but because we chose to live in a different way (typewriters, slide rules, twin-tub washers, woolen underwear, cathode-ray TVs – all gone). Similarly carbon taxes can help to guide our actions into a more sustainable path in the future.

Emissions trading (“cap and trade”) is an alternative method of setting a price for greenhouse gas emissions. In principle either carbon taxes or emissions trading could lead to a stable price for carbon emissions, but in practice emissions trading schemes have had problems with administrative costs and political manipulation. They have also not produced the stable carbon prices needed to guide investment decisions. Anderson and Ekins, page 253, suggest keeping the current EU emissions trading system for large companies but adding comprehensive carbon taxes.

British Columbia’s carbon tax: British Columbia provides an example of how carbon taxes can work. BC’s tax is applied to fossil fuel emissions, estimated to be 70% of BC’s overall greenhouse gas emissions. The carbon tax is based on the amount of carbon in the fuel (allowing a simple calculation of the tax per unit of fuel: 6.67cents/litre (c/lt) on clear gasoline, 7.67c/lt on diesel, 4.95c/lt on liquid natural gas, etc) (Government of British Columbia, 2013). Administratively, the carbon tax is applied and collected in the same way as motor fuel taxes (except for natural gas where the tax is collected directly at the retail level): when fuel is manufactured or imported, the business that sells the fuel for the first time in the province is appointed as the collector, paying the tax upfront and collecting it from the end purchaser. For the individual consumer, the impact of carbon taxes is to make some purchases more expensive, notably oil and gas for transport or heating, but also any product that uses fossil fuels in its manufacture. Over the first four years of carbon taxes, starting in 2008, BC’s greenhouse gas emissions were reduced by 10% per capita (compared to 1% for the rest of Canada) while the provincial gross domestic product (GDP) per capita was essentially flat, as in the rest of Canada (Elgie and McClay). While there was initial resistance to the new taxes, they are now well accepted by the BC public and there is some pride in a system that is being studied by jurisdictions around the world (Reguly). The level of the tax is modest, starting at \$5 per tonne in 2008 and rising to \$30 per tonne in 2012. So far the provincial government has not agreed to raise it further, though it may if the states of Washington and Oregon follow through with their own carbon taxes. The long-run goal should be to set the tax high enough to provide a real incentive for people and manufacturers to move to a lower-carbon lifestyle and to adopt sustainable energy sources. The carbon tax regime has to be permanent and credible.

The BC carbon tax is designed to be revenue neutral, i.e. all revenue raised is returned to taxpayers. In practice BC has used the tax to lower corporate taxes and income tax rates, and has given a flat grant to people who do not pay income tax. (See BC govt website: 2013) – division of the revenue is a political decision (Preston et al, 2013).

A British researcher, Paul Ekins, stated that BC’s carbon tax was the best designed in the world, so far (Reguly, 2013). The Carbon Tax Center, a US advocacy group for carbon taxes, says on its website, “BC’s carbon tax is the most significant in the Western Hemisphere by far. It is also extremely straightforward and transparent in both administration and revenue treatment. Key principles are: revenue neutrality, phased implementation, protection for families and broad coverage.”

Other examples of carbon taxes: Quebec and Alberta also have small carbon taxes as do several US states. Various European countries have introduced carbon taxes. The Nordic countries, Germany, The Netherlands and the UK adopted carbon taxes in the 1990s and others have followed since. (Sweden's carbon tax is a massive \$150 per tonne but the coverage is a little different from BC's). Japan has a tax on gas and coal and India has a tax on coal. China is looking at the idea, as is South Africa. Australia's new conservative government unfortunately cut their carbon tax and also disbanded the Climate Commission which collected information on climate change.

Anderson and Ekins have collected several studies on various aspects of the European experience with carbon taxes. They find positive results similar to those for BC: carbon taxes cause a fall in GHG emissions, while there is no adverse effect on overall employment or on GNP, though high-carbon industries feel an impact.

Current Canadian policies These are outlined in the Government of Canada website, under Canada's Actions on Climate Change. The main actions listed are regulations on vehicle emissions and on coal-fired generating stations, investment in carbon capture and storage, plus promised regulations for the oil and gas sector, as well as other industrial sectors. There is no mention of either carbon tax or emissions trading.

Criticism of carbon taxes: 1) Carbon taxes (as taxes on consumption) hit the poor relatively more than the wealthy: this effect can be offset by redirecting the revenue into increasing benefits for the poor and by raising the income ceiling for taxes, as described in Preston et al. (There is no connection in principle between the carbon tax, which provides income to the government, and expenditure on health care or education.)

2) Carbon taxes are also criticized on grounds of reducing GDP and thus reducing jobs. European research and the BC experience do not substantiate this criticism. Anderson and Ekins (page 183) report that employment in some European countries increased by .5% simply because the shift to carbon taxes takes taxes away from labour and corporations. However companies in high-emissions industries, such as the oil sands, will feel a negative impact owing to their increased input costs.

3) There is also a fear that industry will relocate to jurisdictions with low-emissions taxes ("carbon leakage"); in practice this does not seem to be a serious problem at the current levels of carbon taxes (\$20-\$100 per tonne of CO₂) within the EU (Anderson and Ekins page 236). Any effect could be offset by the use of border adjustment taxes (i.e. charging import duties on goods from countries with low or zero carbon taxes).

Conclusion: The federal government has attacked carbon taxes as "job-destroying" but there is no evidence for this attack. Rather, carbon taxes cause a shift in production from high-emissions industries to low-emissions industries; this is good for the economy and good for the environment (see Calderon and Stern (2014) "Better Growth, Better Climate", for this argument applied to all measures to reduce GHGs). Ideally the federal government should create a carbon tax for the whole of Canada. It should also

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encourage other governments to adopt similar carbon taxes so that there is no temptation for companies to relocate to countries without carbon taxes.

The carbon tax needs to be part of a comprehensive and ambitious federal Climate Action Plan. We urgently need to redirect our economy onto a low-carbon path, so that the planet will remain a comfortable home for our grandchildren and their descendents.

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