



Does your organization support a non-nuclear strategy for Saskatchewan?

Make your views known by signing on to the Coalition for a Clean Green Saskatchewan's position paper.

The Coalition for a Clean Green Saskatchewan's (CCGS) is a growing network of diverse, grass-roots organizations across rural, northern and urban Saskatchewan that supports us quickly moving towards a sustainable society. **We oppose Bruce Power building nuclear plants in Saskatchewan because:**

- 1. Nuclear power obstructs an effective climate change strategy**
- 2. The nuclear fuel chain endangers environmental health**
- 3. The nuclear industry is involved in the proliferation of nuclear weapons**
- 4. Full costing of nuclear power rules it out as an economically viable energy option**

Changing our energy system through a combination of conservation, energy efficiency, co-generation, wind, solar photovoltaic, biomass and small-scale hydro is vital to a non nuclear future.

Rather than moving towards sustainable energy, our provincial government established the Saskatchewan Uranium Development Partnership (SUDP) giving the nuclear industry the inside track for setting provincial energy policy. In the name of adding economic value to the uranium industry, serious consideration is being given to expanding the nuclear fuel chain in our province. The above stated four major points clearly demonstrate why nuclear power is not in the public interest for present or future citizens of Saskatchewan.

If your organization agrees with the Coalition for a Clean Green Saskatchewan position, please sign on to this statement.

Name of Organization: _____

Contact person: _____

Address (include postal code): _____

Phone number: _____

Email address: _____

Email your statement of support to **cleangreensask@yahoo.ca**

or send by post to:

Coalition for a Clean Green Saskatchewan

c/o Karen Weingeist
821 7th Ave North
Saskatoon, SK S7K 2V5

Background on the Coalition for a Clean Green Saskatchewan position:

1. NUCLEAR POWER OBSTRUCTS AN EFFECTIVE CLIMATE CHANGE STRATEGY

Nuclear power is not a “clean” energy alternative. A full energy audit of nuclear power shows a massive carbon footprint from uranium mines, energy-intensive uranium enriching processes, nuclear power plant construction, decommissioning of plants and spent fuel storage. To replace coal-generated electricity it would take 2,500 nuclear power plants worldwide, requiring one new plant built somewhere every week until 2050. There are presently 439 nuclear plants in operation worldwide and only 35 new ones (2008) under construction. Expanding nuclear energy fourfold would reduce total greenhouse gases (GHGs) by only 4% — yet we need reductions of 50-80% by 2050.

Reduction of electrical demand - especially from buildings which are responsible for most electrical consumption - and the revolution in “micro-power”, including distributed renewable resources across the public grid, are already proving to be the most cost-effective means for reducing GHGs.

The nuclear industry has always exaggerated its growth. In the 1980s it said there would be 1,000 gigawatts (GW) of nuclear capacity worldwide by 1990, but in fact it turned out to be only 260 GW. Nearly two decades later it is still only 372 GW. The industry is predicting from 447-679 GW by 2030, which is less than the industry said would exist by 1990. In 2005, renewable electrical capacity surpassed nuclear worldwide, and it continues to grow as nuclear declines.

Even if all the new nuclear plants under construction and those being proposed came on-stream (which is highly unlikely), and there was expensive refurbishing to extend the life of all aging reactors (which is also unlikely), the number of plants approaching decommissioning in coming decades would outstrip all proposed growth in nuclear capacity. What we are really witnessing is a nuclear phase-out.

Industrialized and developing countries must work together to implement an effective non-nuclear energy strategy to avert global warming.

2. THE NUCLEAR FUEL CHAIN ENDANGERS ENVIRONMENTAL HEALTH

B.C., Nova Scotia, New Brunswick, Labrador, and 20 Ontario municipalities have called for or established moratoria on uranium exploration because their watersheds are threatened with contamination from drilling and the dumping of radioactive uranium mine tailings.

Saskatchewan began mining uranium under the secrecy of the War Measures Act during WW II. Uranium workers and communities near uranium mines face great risks from radon gas and other radioactive exposure. We are still fundamentally avoiding the matter of watershed protection while toxic heavy metals including uranium continue to bio-accumulate in waterways and food-chains.

Nuclear power plants routinely give off invisible but dangerous radioactive isotopes into the environment. A series of European and American studies now link higher childhood leukemia death rates with proximity to nuclear facilities.

The nuclear industry creates high-level nuclear wastes that must be isolated from the biosphere for millions of years, but does not have any credible, long-term waste storage strategy. While Manitoba and Quebec have banned nuclear wastes, Saskatchewan is targeted for “deep geological storage”. Indigenous communities who already face the greatest dangers from uranium mining are being beset by the industry-run Nuclear Waste Management Organization (NWMO) seeking agreements to permit nuclear waste storage in their territories. Under the USA’s Global Nuclear Energy Project (GNEP), uranium producers would be required to take back nuclear wastes. The implications for Saskatchewan are ominous.

Renewable energy sources do not contaminate or otherwise compromise the quality of lake or river water, as do coal and nuclear plants with their massive cooling water requirements.

A non-nuclear energy strategy is the way to preserve and restore environmental and human health.

3. THE NUCLEAR INDUSTRY IS INVOLVED IN THE PROLIFERATION OF NUCLEAR WEAPONS

In spite of the Non-Proliferation Treaty (NPT), uranium from Saskatchewan continues to be exported to nuclear weapons states, notably France and the U.S., where the military has access to the depleted uranium (DU) left from enriching uranium for nuclear power plants. DU weapons used by NATO and the U.S. since the 1990s have escalated birth deformities and childhood cancers in highly populated war zones. We can no longer turn our heads from this immorality or try to justify our complicity in return for a few short-term jobs or meagre royalties. It's time to face facts: the so-called "peaceful atom" still goes to war.

Uranium mined at Uranium City in Saskatchewan and Elliot Lake in Ontario was a major source of material for the U.S. nuclear weapons build-up during the 1950s and 1960s. Canada has always been a willing partner in the creation of nuclear weapons. The Chalk River plant in Ontario pioneered the isolation of plutonium for nuclear weapons and laid the basis for the British weapons programs and supplied plutonium directly to the U.S. Chalk River was also the site of the world's first nuclear reactor accident in 1952. The Port Hope plant in Ontario refined the uranium used in the bomb dropped on the people of Hiroshima.

A non-nuclear energy policy is therefore vital to decrease the danger of nuclear weapons proliferation and to increase international peace and security.

4. FULL COSTING OF NUCLEAR POWER RULES IT OUT AS AN ENERGY OPTION

The nuclear power industry was created and sustained through massive state subsidies and bailouts. In Canada government support totals well over 20 billion dollars without factoring in the added costs of debt and interest payments. The Harper government is channelling more taxpayer's money into the nuclear industry (another \$351 million in the 2009 fiscal stimulus budget) even though it's not a cost-effective way to reduce GHGs. Even without counting the costs governments assume by exempting the nuclear industry from liability in the event of an accident, or the costs of decommissioning and perpetual nuclear waste storage, nuclear power is already twice as expensive as most of its non-nuclear competitors. Huge debt loads are created by the cost-overruns incurred during new nuclear plant construction and the refurbishing of aging reactors. For example, Bruce Power's plant in Ontario will cost more than \$5 billion to refit.

While economic development incentives are offered to nuclear mega-projects, renewable energy produces far more employment, is sustainable and strengthens local economies. Wind power provides five times more jobs than nuclear power for generating the same amount of electricity.

Bruce Power's proposal for nuclear plants on Saskatchewan's relatively small electrical grid would require massive public expenditures to expand the grid to allow for power exports, while still requiring expensive back-up capacity for times when the plant must be closed for maintenance and repair. Due to its inflexibility and risk of accidents, nuclear power cannot provide short periods of high output needed to meet peak-load demand. It is an expensive and unreliable way to provide base load power.

Due to its scale, and its need for public monies, nuclear power would squeeze out the cheaper and safer renewable alternatives from the Saskatchewan market.

WE CAN'T LET THIS HAPPEN

Nuclear power is a very costly and risky way to boil water to turn turbines to generate electricity. Electricity can be generated without endangering ecosystems or future generations. Saskatchewan should therefore reject Bruce Power's push to build nuclear plants here. Nuclear power is not a sound energy, environmental, health, water or job-creating policy. The CCGS will work strenuously to ensure Saskatchewan follows a non-nuclear energy policy that is economically and ecologically sustainable.

NOTE: *A more detailed version of this Background Paper with supporting references is available upon request.*