CONCERNS OF FAITH COMMUNITIES OVER SOUTH AFRICA'S FUTURE ENERGY CHOICES:

RENEWABLE VERSES NUCLEAR ENERGY

8th April, 2013

Decisions over South Africa's energy choices are of critical concern for our future well-being. We entered a new era in 1994, ending political Apartheid. Now we need to show the world the right direction by entering a new energy era that overcomes poverty and inequality and improves the health and sustainability of the planet.

We must leave behind the polluting coal and nuclear paradigm with centralised electricity generation and enter the new decentralised clean energy era. With rapidly developing technological advances, renewable energy is beginning to generate "base load" electricity and is becoming the cheapest form of energy.

It is estimated that there are at least two million households without access to electricity in South Africa. Electricity prices are rising steeply, placing an increasing burden on poor households. Fuel costs for both coal and nuclear generation will continue to escalate. There are no fuel costs for wind and solar generated electricity!

Nuclear energy by its nature supplies centralised grid electricity and is designed for energy intensive users. It will not benefit the two million rural households who cannot be reached by a centralised grid. Surely Government's primary responsibility is to provide efficient energy for rural homesteads, not subsidising the massive costs of nuclear energy generation? This can easily be done by providing decentralised renewable energy for rural homesteads

We, members of the faith communities, want to work with government to overcome poverty. We are convinced that new and cleaner sources of energy can meet South Africa's needs. We believe that nuclear energy is not the right policy for South Africa for the following reasons:

- 1. **Employment** After construction, nuclear power plants offer limited employment, predominantly for technically skilled workers.
 - Renewable energy offers huge employment opportunities Germany has increased employment by 350 000 with renewable energy.
 - Renewable energy will stimulate investment and the manufacturing base to grow jobs. South Africa could become the renewable energy hub for Africa.
- 2. **Social** Government should be empowering people, training and equipping them with renewable energy. In rural areas, decentralised community schemes will put power in the hands of the people.
 - New advances in technology using rooftop photovoltaic installations enable citizens to generate power for their own use and then to feed excess power into local grids. In the same way that rural communities can earn income by leasing land to renewable energy developments, urban citizens can rent their roof space, thereby participating in the green economy and benefiting from free renewable energy. This will provide a basic level of services that can be accessed even for the unemployed.

- 3. **Financial** Nuclear energy requires extremely high capital costs which will have to come from government as no banks or private equity invests in nuclear. We believe these funds should be invested in developing people and communities, not centralised nuclear energy.
 - South Africa needs to replace its centralised, monopolistic energy generation with a decentralised system that empowers local communities and people.
 - In the immediate future, coal will continue to supply the extractive industries while renewable energy can be developed and increasingly provide for other uses.
 - Nuclear energy will increase inequity for the poor and wealth for those in control. Nuclear costs will absorb massive amounts of state funds.
 - Like coal, uranium fuel costs will continue to escalate, increasing electricity prices. There are no rising fuel costs for renewable energy. God gives the sun, wind and ocean currents freely!
 - Escalating costs of decommissioning nuclear power plants hasn't been factored into the triple bottom line financial equations.
 - Renewable energy can be financed by the private sector, relieving government of this burden. Government needs to ensure Eskom's involvement in renewable energy and other forms of ownership.
- 4. **Length of time for nuclear power plant construction** There is worldwide experience of delays and rising construction costs. For example, cost projections for the Levy nuclear plant in Florida, USA, have risen from \$3.5 billion to \$22.5 billion in only five years.
 - Natural gas, (not shale gas from fracking), could be obtained in abundance from new gas fields off the coast of Mozambique. This could provide bridging energy within two to three years whereas nuclear has at least a 12 year lead in time.
 - Choosing nuclear locks South Africa into an energy future which will leave us uncompetitive in a world that is changing and innovating rapidly.
- 5. **Environment** Climate Change is alarmingly real. Nuclear energy is NOT a low carbon emission option when taking into account mining, transport, construction and water impacts.
 - It is essential that we live in harmony with the planet and its natural processes. Our priority is to care for people and planet and long term sustainability. This is more important than short term procurement of energy.
- 6. **Ethics** it is unethical to leave a legacy of radio-active waste to future generations.
 - We have to "do the right thing" for people and the planet.
 - God blesses us with Life not nuclear energy. The sun gives life!
 - Most main line churches and faith communities in South Africa, as well as the international community, have expressed opposition to nuclear energy.
- **7. Safety** The nuclear lobby claims that nuclear is the safest form of energy. However, when something goes wrong, it goes horribly wrong, affecting people and planet for generations. If a wind turbine is out of commission, it can be repaired the next week.
- 8. **Corruption -** Because of "security requirements" and the dangers of terrorist attacks, secrecy surrounds the nuclear industry. This lays it open to corruption and the opportunity for a few to make a lot of money.

- 9. **Government's responsibility** We want to work with government to overcome poverty. We encourage government to "do the right thing" for people and the planet.
 - Government has adopted the MDGs and various targets for the provision of energy for all. SAFCEI, on behalf of the faith communities, would like to help achieve these targets, particularly to ensure that the poor receive sufficient clean energy.
 - Unfortunately our present direction and economic policies in South Africa, and indeed globally, are increasing poverty, unemployment, inequity and environmental destruction. We will not solve our problems using the same means that caused them.
 - Government must implement a feed-in tariff for small, medium and large scale renewable energy generation as a matter of urgency. This has proven successful wherever it has been implemented.
 - Current limitations capping renewable energy generation and feed-in must be lifted and government must implement a feed-in tariff as a matter of urgency.
- 10. **Justice and Equity** The faith communities believe we need to be courageous and innovative as we move into a new energy era. We ask our government to be bold. At stake is whether we have an economy and energy policy that benefits all South Africans, or one which further enriches the powerful and elite.
 - We ask that the National Development Commission look at the new economic paradigm needed to establish justice and equity in our economic system.

Inspirational quotations:

God saw everything that he had made, and indeed, it was very good. (Genesis 1: 31)

The Lord God took the man and put him in the garden of Eden to till and keep it.

(Genesis 2:15)

But seek, through that which Allah has given you, the home of the Hereafter; and (yet), do not forget your share of the world. And do good as Allah has done good to you. And desire not corruption in the land.

(Qur'an 28:77)

A human being is part of the whole called by us 'the universe', a part limited in time and space. We experience ourselves, our thoughts and feelings, as something separate from the rest – a kind of optical illusion of our consciousness. This delusion is a kind of prison for us, restricting us to our personal desires and affection for a few persons nearest to us. Our task must be to free ourselves from this prison by widening our circle of understanding and compassion to embrace all living creatures and the whole of Nature in its beauty.

Albert Einstein



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