

# Illogics of Nuclear Power

**By Verity Carney**

It would seem is the time to confront the logic of the nuclear. In confronting the nuclear we must confront the indifference: the politicians and their chicanery; the industry and its motive and the reality of the consequence.

Currently there exist a few more than 465 nuclear reactors world wide. These reactors in total produce less than 20% of world energy. Already two have melted down reaking havoc and destruction of the order that few previously could imagine.

Radioactivity leaves an unmistakable irreversible legacy. It mutates the DNA, causing chromosomes to break and/or misshape - causing cancer, disease, birth defects and general molecular sabotage of the human gene pool - birth defects and genetic mutations of future generations - thalidomide forever. These mutagenic effects of radioactivity are only now beginning to become evident - it a generational thing. Nuclear energy produces radioactivity which is unsafe. It kills, it causes cancer, it mutates the DNA. It is disasterous effects are irreversible and we will have to live with these emissions for the next half a millions years.

Unfortunately the issue of world wide energy production has been

posed within the debate of clean vs unclean energy. It is unfortunate because casting the problem this way seems to vindicate nuclear energy production. The nuclear, it would seem, becomes the nu-clear alternative. It doesn't release carbon dioxide (which incidentally is what trees breathe in to make oxygen) and it doesn't sediment on our mantle pieces as soot. But the issue is not clean / unclean - it is safe / unsafe. And it is about time that the sustainable energy debate should be re-caste into the logic of safety.

If governments were really concerned about the greenhouse effect of carbon dioxide emissions they wouldn't be permitting the wholesale deforestation in each of their own territories - nor would the international community bear silent witness to the destruction of the last frontiers of world heritage forests of Borneo and the Amazon. Light rail expansion would be of a higher order priority than the expansion of highways and byways. And they wouldn't be adding sulphur to petrol.

The greatest irony of the Nuclear Industry is that for all the trouble - the costs and dangers, the hype about efficiency and the lies about waste - Uranium is only the heat element in a big mechanical kettle. That is, Nuclear reactors use uranium, to boil water to make steam that creates the pressure to turn turbines that then generate electricity. And that is it. As if there didn't already exist many other ways, natural ways, to turn turbines. Wind can do it, tidal waters can do it. In fact the whole steam and turbine concept is really a nostalgic attachment to the industrial revolutions first bright idea - the steam engine. And really lets face it we've come a long way since then.

There is solar technology. Solar cells made from thin slices of crystalline silicon, or other semiconductor materials convert the light from the sun

directly into electricity. **Photovoltaic electricity** - harnessing the sun's energy through solar cells - is in fact the cheapest, most efficient alternative. It produces no toxic waste, so no side effects, no clean up costs, no environmental destruction, no source depletion, no greenhouse gasses - just pure unadulterated sustainable power. So why is its' only applied use on satellites, spacecrafts and calculators? Now that is the trillion dollar question.

The whole problem of energy production within mass civilisations is the centralisation of energy production. The solution is decentralisation - solar panels on rooftops basically. The only reason this is not a considered alternative is that once individual households make their own electricity no-one can charge them for it. Simple as that. There is a lot of money to be made by energy companies every time someone turns on a switch. These companies will lose profit if individual households produce their own power. They can't make solar power profitably for us because solar panels require surface area. It is inefficient for commercial centralised mass production because the scale of surface area required for a city's energy would require much land - but every house has a rooftop which means that the space required exists for no added cost to the individual energy consumer.

Political democracy in the case of the nuclear is a rubber stamped sham. Our current leaders are professional pied pipers - and it's not because we don't pay them. It is time to put the Nuclear on the political agenda - to choose how we wish to live - with cultural, political and molecular integrity. Power to the people who can cast a vote on anything but the random irreversible bio-genetic sabotage we have had thrust upon our otherwise happening stage of human evolution.

The truth is that there is no safe level of radiation and radioactivity can not be contained. Whatever we release now we will have to live with for the next half a million years and that is a scientific fact.

When meltdown can happen, when weapons testing does happen, when waste is uncontainable it is obvious that existing reassurances about existing safeguards are not an adequate guarantees that we are placing our species future in the hands of care or sense.

We do not inherit the earth from our parents we borrow it from our children.