

## WORLD GOODWILL

## NEWSLETTER

A quarterly bulletin combining comment and information on world affairs with details of the work and programme of World Goodwill

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## A MATTER OF ENERGY

It has been suggested that "all knowledge concerns energy, its application, and its use and misuse". Ever since Einstein, humankind has come gradually to understand that matter (mass) and energy are aspects of one thing, and are interchangeable. The energy locked in matter is now being released in huge, unexpected quantities, both for constructive and potentially destructive purposes. It could be said that we now live in an energy-conscious age and that for the vast majority of men and women on this planet it is all a matter of energy: energy to keep warm or cook food; energy to labour, to obtain enough to eat; energy to build houses, workshops and factories and to run them; energy in the form of money to finance these enterprises; energy to plan the future, take initiatives, be creative; energy in sum for the whole planet and all that lives on it to survive and to evolve. It is now being realised we live and move and have our being in a vast and complex system of interacting and interlocking energies.

This growing preoccupation with energy is one of the most remarkable features of our time. In this issue of the Newsletter we examine the way in which it is beginning to dominate thought and activities in such fields as politics, international relations, science, healing and economics.

At the centre of this preoccupation is a growing concern with issues of ethics, responsibility and wisdom in our use of energy. This is clearly the case in the political and environmental domain where, at a local, national and international level concern about global warming, acid rain and resource depletion is producing a radical transformation in the way in which we think about energy use. It is also the case in economics where proposals for energy taxes and energy audits are being considered by governments, local authorities and international agencies. As the Council of the Club of Rome pointed out in their recent report, *The First Global Revolution* "there is a strong argument at this stage of human development to devise a new economics based on the flow of energy".

In medicine and healing the development of new techniques of conventional medicine, together with modern applications of the ancient Chinese system of acupuncture, are leading to a growing recognition that the human being is a 'coherent, integrated, interdependent unit of energy'. A growing body of esoteric and spiritual teachings, with links to all the major world religions, affirms this recognition and takes it a step further. Spirituality itself is seen to be about right use of energy — taking responsibility for the quality of the energies embodied in our attitudes, thoughts and emotions.

Energy follows and is directed by thought. The most serious pollution on the planet is the pollution of the psychosphere — the mental and emotional planes of expression. Ancient self-centred and separative instincts have always had a destructive effect, but they are particularly dangerous in our present age of interdependence. They drive and energise all the forces that lead to the pollution of the physical world.

There is, thankfully, a vast powerhouse of goodwill energy alive and circulating through the thoughts and emotions of vast numbers of people at this time. The service network, which is the transforming agent for local, national and international behaviour, is powered by this potent stream of goodwill together with the spiritual energies of inspiration, intuition, love and compassion.



# CRITICAL ISSUES IN THE ENERGY DEBATE

We live within an ocean of energy, a vast abundance of dynamic, "stored work" that powers all processes of life, from the creative forces of evolution, through to the consciousness of a human being, and the fall of an apple from a tree. All is energy. In our subjective life as well as our objective, physical life, we are constantly using, converting and directing energy. Even when we are asleep, scientists tell us, our "body is converting energy — breathing, pumping blood, sending nerve-impulses — at a rate of about 100 watts, comparable to a bright light-bulb".<sup>1</sup>

Over 99% of the energy conversions that drive the physical, biological and chemical processes of the planet come from the sun. "The heart of the sun pours out high-quality energy in the form of sunlight",<sup>2</sup> some of which, when it reaches the atmosphere, is converted into the heat that warms the air, soil and water and some of which is stored as chemical energy in the starch and sugar molecules of plants.

One of the most magical features of the human kingdom throughout history has been our ability to convert and use energy in an intentional manner. From earliest times, wood containing stored energy from the sun has been gathered and used as fuel. Even today, half of the world's population is dependent on fuel wood for cooking and heating.

Modern industrial society is fuelled by other sources of energy. Coal, oil and natural gas are used to convert the locked-up energy of the sun into the mechanical energy that drives the engines of the technological age. And the splitting of the atom has propelled humanity into an entirely new dimension in our ability to harness energy for our own purposes. It has enabled us to 'liberate' the energy of matter itself, releasing stupendous power, with all the benefits and problems this has meant.

But while the unplanned, haphazard growth of power industries throughout the world has fuelled the rise of modern industrial society, it has also led humanity to the brink of disaster — so much so that governments, international agencies and thinking people everywhere are now engaged in an urgent, at times passionate debate about where we should go from here. How will the interdependent world of the 21st century, with its visions of health for all and sustainable development, generate the energy it needs? The energy debate and the negotiation of regional and international conventions and national policies is the first stage in the evolution of a conscious, global plan for the wise and responsible supply of humanity's energy needs.

## Environment and Development

Environmentally, the unrestrained burning of fossil fuels (coal and oil) has been the major contributing factor to atmospheric pollution and global warming. For aeons, the earth's level of carbon dioxide (CO<sub>2</sub>) and carbon stored in plants has been balanced, with little overall change in the level of CO<sub>2</sub> in the atmosphere. Since the 1850s, however, the average concentration of CO<sub>2</sub> in the earth's atmosphere has increased by 25%<sup>3</sup> and scientists are agreed that the major cause is the burning of fossil fuels.

In addition, coal-fired power stations release a poisonous

mixture of sulphur and nitrogen oxides which, in reaction with the moisture in the air, produce vast quantities of 'acid rain'. And the nuclear power stations, which were to have provided cheap, abundant energy, have proved both hugely expensive and involve such risks to the health of the population and the environment that increasing numbers of people are questioning whether the energy gained is worth the risk. After Chernobyl popular support for nuclear energy has declined dramatically. However, even before Chernobyl, in 1980, the people of Sweden decided in a referendum to shut down all nuclear reactors in that country by the year 2010.

## Need in the South

The South's urgent need to develop societies in which a reasonable standard of living is provided for all poses an enormous energy problem. Where will the power come from for industries, for homes and for such basic appliances as refrigerators and televisions? If the earth cannot sustain the level of pollution and CO<sub>2</sub> emissions from existing power supplies, what hope is there for the people of Nigeria, China, Ethiopia and Brazil and all the other Third World societies as they plan their future?

So what is to be done? Intensive research and technological developments carried forward since the 1970s do show that, given a sufficient will, it would be possible both to meet the massive needs for power in the South *and* to reduce overall pollution from fossil fuels. However, in order to achieve these ends a surge of international purpose and goodwill is required.

## Conservation

Two words sum up the way forward for energy policies: conservation and renewables. Up until the 70s, research concentrated on ways of making more electricity, gas and petroleum available in order to provide for growth in national economies. This focus on the need to increase the supply of power was, not surprisingly, controlled and largely funded by the energy industry itself. Since the 70s, independent groups and international agencies have begun to play a leading role in research, and their work has shifted the focus from an unquestioned belief in the need to produce more power to a close examination of the way in which energy is used. It has been established that, in industrialised societies, the largest single use ("anything from 25 to more than 50 per cent of the total used") of energy supplies is for heating water and space and that the next largest application of fuel (25 - 35%) is to power transport (mainly petrol for motor vehicles).<sup>4</sup> With this knowledge, researchers concentrated on how these jobs (and others such as lighting, and powering industry) could be done more efficiently.

Today we know that simple techniques of conservation can produce enormous savings in energy use. The Rocky Mountain Institute reports that a single new 18-watt compact fluorescent bulb replacing a standard 75-watt bulb can, in the bulb's lifetime, save the emission of around 1 ton of CO<sub>2</sub> from a US coal power station without any loss in the quality of lighting. We also have the know-how to produce cars that are very much more energy-efficient and less polluting than existing models, and we are aware that regulations reducing



### DONATIONS

I enclose my contribution of R\_\_\_\_\_ to support the work of World Goodwill.

This donation will be shared between the International Headquarters of World Goodwill in London which prepares and prints the Newsletter and other literature and the South African Goodwill Association (SAGA) which mails the Newsletter and helps distribute World Goodwill material in South Africa. Both World Goodwill and the South African Goodwill Association are funded entirely by donations. Thank you for your help.

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