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**EVALUATE ENERGY OPTIONS SENSIBLY.**  
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Nobody denies that making fires helped mankind to survive, but isn't it time we start using our acquired knowledge to solve the problems this is causing to our health and our environment?

So why not apply some common sense and address this problem by identifying the cause of the problems and then establishing criteria any new energy solutions will have to meet.

We are starting to identify some of the problems caused by burning fossil fuels, so in order to evaluate new energy solutions; they should be evaluated on the following criteria.

1. It should not pose a public health threat, due to air pollution.
2. Its generation and use of energy should have no or minimal impact on the earth's biosphere.
3. The energy should be able to be stored and only used when needed.

Evaluating our present energy use on these three criteria, it is obvious that one of the major problems is caused by air pollution and poses an enormous health risk to humans, especially children. This burning process, besides emitting carbon dioxide and nitrous oxides, also emits heavy metals (mercury), fine particulates and when coal is used also radioactive matter. For this reason alone, mankind needs another source of energy.

Regarding the second criteria, probably everybody already is aware of global warming due to the increased carbon dioxide in the atmosphere, but hardly any attention is given to the increase of nitrous oxides in the air, not only contributing to global climate change, but to the nutrient enrichment of the biosphere, adding to this impact due to the horrendous increased use of synthesized fertilizers. This nutrient enrichment causes in open waters eutrophication, resulting in red tides, coral reef destructions and 'dead zones', while on land, due to 'green rain', causes excessive grass and brush growth during wet weather and hard to control range and forest fires during droughts.

The third criteria applied on the present use of electricity is, while very convenient, very wasteful, especially since power companies have to supply electricity to the public when it is not needed and consequently is wasted. It would not be surprising if more than 70 to 80 % the energy content of the fossil fuel to generate transport and maintain this power requirement, is wasted and never used by customers.

Some will say that meeting these three criteria is not possible, but instead of focusing solely on chemical oxidation (fire), we only have to look at nature and how its energy cycle is based on water. How autotrophic life (vegetation) for millions of years has used sunlight, to split water into hydrogen and oxygen. The hydrogen with carbon dioxide and 'reactive nitrogen' grows organic matter, whereby oxygen is released. This organic matter then is used as an energy source by heterotrophic life (like humans) whereby the hydrogen with the oxygen again becomes water.

Mankind as of today has not found a way yet to use and manipulate biochemical processes (like photosynthesis) to split water into hydrogen and oxygen on a large scale, but we know how we can use electricity to split water and there are many methods and locations on earth where we can generate electricity, by tapping into the horrendous exchange of energy between the sun and the earth, without impacting the earth's biosphere. Here, hydrogen and oxygen can be generated, stored and transported to where it can be used when needed.

Will such a common sense approach be used to evaluate alternative energy sources? Probably not, since special interest groups again will claim to possess the sole knowledge to solve this problem on their own terms.