

Re: Hydrogen

Source: <http://sci.tech-archive.net/Archive/sci.energy.hydrogen/2004-12/0018.html>

From: Jed Checketts (jedcheck_at_yahoo.com)

Date: 12/02/04

Date: 2 Dec 2004 12:25:20 -0800

Fred Kasner <fkasner@enteract.com> wrote in message news:<Hzapd.36898>
> >

> *And of course the insolation in most of the major metropolitan areas of
> the USA and of Europe are equal to and even exceed those of southern CA.
> You have once again demonstrated that you are a deluded fool, Jed. You
> just can't use solar energy from PV cells or even solar ovens to produce
> any considerable amount of energy directly or indirectly.*

Of COURSE you can! Kramer Junction at 150 MW electricity production proves you wrong. Hydrides could be a great answer for storage and distribution of this energy to markets in Europe etc. which have less sunshine than the California Desert.

Solar is like your weird belief in hydrides to drive engines

> *a niche project. In places where small amounts of energy are desperately
> needed but fuel importation is prohibitively expensive some use could be
> made of this. But as a general solution you must be out of your mind if
> you think any significant amount of solar energy would be available to
> feed the electric grid in most places in the USA.*

Work towards solar wind, geothermal and other alternative technologies is a move in the right direction instead of relying totally on gas and oil.

>
> *Stupid little boy, bauxite is a name of a varying composition ore. The
> minerals that are found in it are mostly alumina, some iron oxide, some
> silica, and some titania. The major ores in use today are Bibbsite and
> Boehmite. These two have 65% and 85% alumina respectively. The ore
> processing is thus less of a problem than it used to be when bauxite was
> the main source of alumina. And your insistence that iron oxide is 50%
> of bauxite is utter nonsense. Once again try the EB for source about
> such details.*

Again Fred, bauxite is the main source for aluminum production and is a 50/50 mix of iron oxide and aluminum oxide. The electrolysis of

aluminum oxide takes place only using relatively pure aluminum oxide dissolved in cryolite. This electrolysis uses DC power and ends up splitting the Al_2O_3 into aluminum metal (along the bottom of the container becoming one of the anodes) and into Oxygen gas which leaves the top of the cell.

- >
- > *The behavior of Californians and California companies is hardly one to*
- > *hold up as virtuous for all to mimic. So forget the fast and loose*
- > *stupidities of that western state in regard to electricity.*

California produces and consumes a higher percentage of renewable energy than any other state in the United States.

- >
- >> *It seems like the government does a great job of breaking up*
- >> *monopolies, unless of course, it owns the monopoly itself. And you*
- >> *may think that the government needs to own and sell electricity*
- >> *because of humanitarian reasons.. ie, poor people shouldn't have to*
- >> *pay as much for it. However, the reality is that Dupont Corporation*
- >> *in Niagara Falls, New York continues to pay around 1 penny per KWH for*
- >> *BILLIONS of KWH's of electricity used in salt electrolysis while the*
- >> *poor widow next door pays \$.14 per KWH (1400% higher).*
- >>
- >> *We have to fight for the right of small business to exist.*
- >>
- >
- > *The content of the above two paragraphs seems totally devoid of*
- > *connection to the issue of the technology of solar to electricity*
- > *conversion and its economic controlling factors. You seem to be totally*
- > *hooked on some kind of weird environmentalism without any rational*
- > *consequences. Even the left of the Democratic party (I'm somewhat less*
- > *left than they are) seems to be waking up to the fact that you can't*
- > *invent something from nothing. And you can't pull yourself up by your*
- > *boot straps. Everything has a price determined by the cost to produce*
- > *and the cost to produce the things needed to produce it. If that cost is*
- > *too high then it becomes a joke to claim that you can produce it cheaply*
- > *enough to replace the present sources of energy.*
- > *FK*
- >
- >>
- > *Jed Checketts*

My computer time is up so I will not comment on the above other than to say that Solar energy is not getting the attention that it deserves. It is a good, clean and renewable form of energy. It could be used to convert sodium aluminate into sodium aluminum hydride as a form of hydrogen stored in a safe and compact format.

Jed