



Hydrogen Distribution

Currently there is no system for Hydrogen distribution established that would allow it to be possible for it to become a main energy source. There has been an established distribution network for gas and petrol for many years. It is not possible for a distribution network for Hydrogen to simply be built over night; it will take many years and millions of pounds to introduce. This is currently preventing Hydrogen from becoming a widely used energy source.

Ways are being looked at that will allow a Hydrogen distribution network to be established and evolve while we are still relying on existing energy sources. One such way of allowing this to occur is Hydrogen injection. Injecting Hydrogen into the existing natural gas system increases its calorific value. The resulting gas would still be suitable for all existing appliances but would also be used to run natural gas fuel cells or be reformed at the point of use to power Hydrogen fuel cells. As the existing appliances break and wear down they would be replaced by the fuel cell alternative. Eventually all of the appliances would be run on Hydrogen allowing the gas grid to be altered accordingly. The electricity grid may eventually be able to be removed, as the fuel cells would be able to produce any electricity in close proximity to the location in which it is required.

For it to be possible for motor vehicles to be powered by fuel cells there must be some way of providing the fuel cell with Hydrogen. We are presently used to driving to the refueling station when we require fuel for our vehicles. There seem no serious problems with this network of distribution. For fuel cell vehicles to compete with the internal combustion engine vehicle they must be able to refuel the vehicle with the ease and convenience currently available and also compete on the basis of cost. If a way of adapting the current distribution network to allow Hydrogen distribution then we could well see Hydrogen competing as a fuel in the not to distant future.