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The use of green nano hydrogen as fuel and its effect

Abdelsalam Abuzreda

University of Benghazi, Libya

Renewable energy is now considered a more desirable source of fuel compared to nuclear power due to the absence of safety risk and disasters. Considering that the major component of greenhouse gases is carbon dioxide, there is a global concern about reducing carbon emissions to minimize the problem of climate change. In this regard, different policies could be applied to reducing carbon emissions, such as enhancing renewable energy deployment and encouraging technological innovations. Two possible solutions may be implemented to reduce carbon dioxide (CO₂) emissions and hence to overcome the problem of climate change: replacing fossil fuels with renewable energy sources as much as possible and enhancing energy efficiency. In this paper, we discuss alternative technologies for enhancing renewable energy deployment and energy use efficiency keeping into consideration of climate conditions in Libya. Green Nano hydrogen is a universal, light and highly reactive fuel, through a chemical process known as electrolysis. This method uses an electric current to separate hydrogen from oxygen in water, if this electricity is obtained from renewable sources, we will produce energy without emitting carbon dioxide into the atmosphere. Hydrogen is the most abundant element in the universe, but on Earth it does not appear pure in nature and requires energy to separate. The most common method is to extract hydrogen from water, which is made up of two parts hydrogen and one part oxygen (hence H₂O). Doing so is fairly simple. You can use heat and chemical reactions to release hydrogen from organic matter such as fossil fuels. However, this is considered very polluting.

Biography

Abdelsalam Abuzreda has done PhD in Nanotoxicity on Molecular and Physiological Characteristics, Assistant Professor and Postdoctoral Research fellow, Department of Health Safety and Environmental (HSE), Arabian Gulf Oil Company (AGOCO), Benghazi, Libya.

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