



Interview to Antonio Chica: “Hydrogen as a means to meet energy needs”

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Antonio Chica talks about the use of hydrogen in an interview offered by Universidad Complutense de Madrid, UCM.

You can read the news if you click this LINK (SPANISH)

<https://cursosveranoucm.com/noticias/el-hidrogeno-como-medio-para-satisfacer-las-necesidades-energeticas/>

ENGLISH:

“Hydrogen as a means to meet energy needs”

With an eye on the decarbonization of the economy, the main objective is to ensure that all those sectors that are not electrifiable can free themselves from coal as a source of energy, replacing it with hydrogen. At least that is what the CSIC researcher, Antonio Chica Lara, believes. to have the obligation that 25% of the hydrogen they use is green. “Hydrogen is an exceptional vehicle to meet all the energy needs that are outside the carbon cycle”, explains Chica Lara.

It is not an easy bet, because the industries have their established processes, they are very adjusted and they produce in a very profitable way, so having to change them and adapt them to this new sustainable strategy is difficult for them. However, the legislation establishes that these changes have to be made, and therefore the companies "are up for the job, because they know they have to comply with the law," says the CSIC researcher.

In the specific case of Spain, Chica Lara assures that our country “has enormous renewable potential”, mainly through solar and wind energy. "What happens with them -explains the expert- is that when they are needed, maybe there is no sun, or there is no wind, so energy cannot be provided".

And that is precisely another of the great advantages of hydrogen, that the energy it produces can be stored. "If you have electrolyzers you can generate hydrogen and store it, use it when

those electricity needs arrive and renewables are not capable of generating it," the researcher stresses.

In Spain the potential is so high that the Government has made its own route, in which, among other things, it establishes four megawatts of hydrogen power; the implementation of 150 hydrogen plants, the use of hydrogen trains or the manufacture of thousands of vehicles by the sector's industry. "Spain is very clear about this, and wants to commit to renewable energies and hydrogen as a storage possibility for these renewable energies, as well as to bring hydrogen to non-electrified industries so that they can provide services," says Chica Lara.

For the expert, another of the benefits of the use of hydrogen is its ability to achieve economic independence for our country, as it does not have the need to import other energies that are so necessary today. "Imagine that the industries that operate with natural gas did not have to depend on it, but on the hydrogen that we generate. The idea is that we not only generate the hydrogen we need, but also, having the capacities we have in renewables, we provide enough hydrogen to export to Europe, which does not have the possibilities that we have", concludes the expert.