



Tech Talk

Ouarzazate Solar Power Plant ©

by John McCarthy

Hi and welcome to another edition of 'Tech Talk', brought to you by the brightest on the web dial: EnglishWaves.fr. Now, the 2015 United Nations Climate Change Conference is currently under way near the city of lights, where 147 Heads of State and Government are meeting, hopefully to hammer out an ambitious, binding international climate agreement that will apply to all countries, and will include a consensus on the actual finance, where developed nations will help developing countries with the costs of going green and indeed the costs of coping with the effects of climate change. Hard-headed scientists believe it's unlikely that a Paris deal will be enough to stop a potentially dangerous climate change over the coming century, and according to the U.N. pledges to cut emissions made ahead of Paris will, in all probability, leave the world on course for warming of at least 2.7° C. However, the objective is to provide a framework agreement that will make countries improve those pledges in time.

The stakes are high and whether you're a wizened, battle-hardened eco warrior or an impenitent self-indulgent C.C. doubting Thomas, more and more people are coming to the conclusion that it's time to join forces and try to reverse levels of atmospheric pollution, which have reached truly alarming levels in many parts of the planet, and are in turn poisoning the land and sea and thereby entering the human food chain, with potentially nefarious consequences for public health.

It's very encouraging to see that some developing countries have grabbed the bull by the horns, and Morocco, for example, has vowed to get 42% of electricity generation from renewable energy by 2020. The U.N. has praised the country for this level of ambition, and will receive \$9 B in investments from international financial institutions such as the World Bank. Morocco is geographically blessed when it comes to the possibility of exploiting renewable energies, with enormous potential provided by the vast capacity of Atlantic wind,

mountain hydropower and of course, abundant Saharan sun. The country is already extremely close to bringing part of these plans to fruition, as a giant plant using energy from the sun to power a city at night will open in the very near future. The Saudi-built Ouarzazate plant will be one of the world's biggest when it reaches completion, with huge parabolic mirrors covering an area of 35 football pitches tracking the sun throughout the day, and developers maintain that phase one (*Noor* in Arabic) of the four-phase plan will bring energy to a million people. Half a million mirrors arranged in 800 rows for the moment; *Noor* 2 and 3 scheduled to begin in 2017, and the final plant which is due in 2020, will mean that the completed renewable energy complex will take up as much space as the capital city of Rabat. Future phases of the project will improve on the technology, storing energy for up to eight hours. Solar prices are tumbling everywhere, and this could encourage other sun-soaked countries to follow Morocco's example, persuading them perhaps through financial aid and incentives to use the plentiful desert sunshine, potentially permitting them to run 24/7 on solar energy and even export solar power supplies to Europe, as it's believed that solar panels covering just a small fraction of the Sahara's surface could power the whole of this continent.

Sunshine may be a little more sparse here in France, but the country has 3400 km of coastline and many fast-flowing rivers. The potential for tidal power is enormous, and may well be the subject of a future programme.

That's it for today, thank you for listening and do join me next time for another edition of 'Tech Talk', on EnglishWaves.fr.