

Renewable energies in Friuli Venezia Giulia: what is available and to what extent

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Renewable energies are an hot topic in the regional and national policies. All these policies, nevertheless, have to be based on a clear evaluation of the potentialities and draw backs of “renewables”. Trying to give useful numbers to policy makers, a general overview of renewable energy potential in Friuli Venezia Giulia (Northeastern Italy) is here presented. Amount and variability is described for solar energy as well as wind energy. Even if solar energy is, on average quite constant by year to year, its small scale variability (on the order of days) makes it unsuited for many purposes. Moreover, solar energy is quite well tuned with the gross energy request, but not with the domestic one, making it unsuited for self-production. Wind energy, on the contrary, even if poorly available in Friuli Venezia Giulia and not tuned with the gross-request, it is quite well tuned with private domestic demand. Even if biomass is not directly related to meteorology, nevertheless it is one of the mostly available sources of renewable energy in Friuli Venezia Giulia. This important source has to be however carefully managed, because of its role as carbon stock and because of its negative impact, with the currently available technologies, on particulate matter emissions. The impacts of meteorological variability on energy consumption has to be in particular account for a correct energetic planning. Some useful examples are shown on how atmosphere can reduce or increase energy demand and which lesson can we learn from this.