Preview

In our research about the situation of renewables in Italy we found surprisingly good news. But it is still very concerning that when you travel through Italy you do not see much solar power around the area or on private properties.

Our research focuses on the situation of renewables in Italy and Tuscany with a little more information when it comes to the pollution in Solvay and possible solutions.

What surprised us a lot is that Tuscany won the blue flag in 2021 for clean water and environment quality despite the big pollution caused by Solvay's factory. But there is hope:

There are ten Geoparks in Italy.

Geoparks are protected areas by UNESCO. In Tuscany the best known Geopark is Colline Metallifere that is known to be in the process of being expanded by 96km. In it's final stage it will be including Castelnuovo val di Cecina, which is near Volterra, on the hills. (https://www.thinkgeoenergy.com/geothermal-energy-tourism-sustainability-geopark-of-colline-metallifere-italy-to-expand/amp/)

This development might push for some sustainable changes in the regions. It might force regulators to rethink practices like energy & industrial production from a sustainable viewpoint in the future. This might mean that Solvay might have to deal with stricter rules and regulations and really take its pollution seriously.

In 2014, Italy had very ambitious plans for a renewable future which included 17% of the heating and cooling, 26% of electricity and 10% of transport to be powered renewably by 2020.

The current energy mix in Italy is including 18% of renewables -(<u>https://www.statista.com/statistics/873552/energy-mix-in-italy/</u>). So it is quite far from the target for 2020. But fortunately for us Italy is in place six in installed photovoltaic (PV) worldwide just after China, USA Japan, India, Germany. When you count the percentage of domestic energy production, Italy is even first place when it comes to PV energy with 8.2% of the whole countries energy mix (IEA 2021: Key World Energy Statistics 2021 <u>https://iea.blob.core.windows.net/assets/52f66a88-0b63-4ad2-94a5-</u>29d36e864b82/KeyWorldEnergyStatistics2021.pdf).

When it comes to in wind energy usage, it is only on place 14th (Net installed capacity place 10,7GE IEA 2021). Luckily, also the wind energy gets used more as from Gran Pino, we can see the wind power stations on the Riparbella hills.

How could it get better?

People with the necessary funds should invest in renewables or build small power plants in their houses, like solar panels, or small wind turbines can be placed in houses since they are more affordable. Using different types of energy that are not so common can help too: biomass systems and hydroelectric systems for example in a small river are very efficient and can really make a difference. Also you can get an electric car or get rid of it completely.