

MILAN'S VIMERCATE ENERGY PARK SERVES AS AN EXAMPLE FOR RENEWABLE ENERGY



Alternative energy seeks to provide an answer to the world's energy problem, particularly as it relates to global warming. Due to climate change, population growth, and fossil fuel depletion, alternative energies have a critical role to play in providing solutions for a more sustainable future. The term "alternative energy" is used in contrast with the term fossil fuels. By most definitions, alternative energy doesn't harm the environment, a distinction which separates it from renewable energy, which may or may not have a significant environmental impact.

Examples of renewable energies are: sunlight, geothermal heat, wind, tides, water, and various forms of biomass. These energy sources cannot be exhausted and are constantly renewed.

Milan, Italy is constantly on the lookout for alternative energy sources.

Unfortunately, its location and other characteristics leave the city with few options. Even though Milan is built around a network of water channels, the city is unable to transform that water into a source of energy.



Wind power is another important alternative energy source whose use is impractical in Milan. It is true that wind power is one of the most promising alternatives to fossil fuel-generated electricity. And although wind energy is now more affordable and more widely available than in the past, it does have some drawbacks that make it less suitable for Milan than for other places.

This is because wind power suffers from the same lack of energy density as direct solar radiation. This means that it is a diffuse energy source, and a large number of wind generators (and a large area of land) are necessary to produce a useful amount of heat or electricity. Therefore, building and maintaining a wind farm can be costly.

Solar power is the most-relied-upon alternative energy source in Milan. Solar power is also considered to be the best alternative-energy option from an environmental perspective. This is because with solar power, there is no acid rain, no urban smog, and no pollution of any kind. Sunlight is also available everywhere and under all conditions (except when it's cloudy).

Universities and buildings all over Milan are being restructured to include solar panels. Milan is also developing projects that aim towards sustainability and the use of energy-efficient resources.

One example of an area that has successfully used renewable energy is the Vimercate Energy Park, located about 20 kilometers from downtown Milan, in the Technological Hub of Brianza. The development covers an area of 160.000 m². It is currently home to Alcatel Lucent's Italian Headquarters as well as some of their worldwide divisions, occupying a total of 50.000 m² of offices and research laboratories.



Energy Park is being built with a special commitment to the most ambitious sustainability goals. Each of the new buildings will have a core depth of 22 meters and a ventilated façade containing precast concrete panels. These layered walls will include Rockwool insulation and a steel-paneled outer layer. The size of the windows will guarantee lots of natural light, all while protecting against direct irradiation.

The project seeks to provide Milan with new infrastructure as well as protected green fields, natural habitats, and other resources. By reducing heat differences between developed and undeveloped areas, Energy Park hopes to minimize Milan's impact on environment.

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