



Activity C2.

Energetic transition. What's the future in the use of energy.



Erasmus+

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CLEAN ENERGY

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CLEAN ENERGY, what is it?

A renewable energy source is an energy form that respects the natural world's resources.

It is not contaminated or depleted because it can be regenerated at the end of the cycle.





TYPES OF ENERGY

Solar Energy



Wind Power

Hydroelectricity



Biomass Energy



COST

From 2010 to the present, solar and wind power costs have continued to fall, gradually incorporating the most mature technologies such as bioenergy, geothermal and hydroelectric technologies.





WIND and SOLAR energy

Wind and Solar energy are renewable energies
(do not pollute the environment).

Wind energy

Wind energy uses the wind to produce energy
through tools called wind turbines.

Solar energy

Solar energy uses the sun to produce energy
through tools called solar panels.



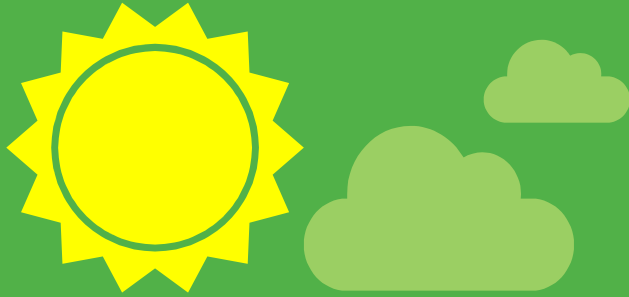


SOLAR ENERGY

Solar energy is a collection of electromagnetic waves from the sun.

There are two ways to use solar energy:

- Heat effects, i.e. heat water or air with radiation received by panels.
- The electromagnetic effect of converting the energy of radiation into electricity.







WIND POWER

Wind power is the kinetic energy generated by moving air.

Wind is the movement of air on the earth's surface between high and low pressure areas, so the energy from the sun is the engine.

Certainly the oldest application is sail-based navigation.

De Michele
Dejanira





Wind energy

Advantages



Solar energy



-It does not pollute the environment

-it is free and everyone can use it

-wind turbines can be installed in remote areas

-low maintenance and minimal running costs

-It does not pollute the environment

-reduction of carbon dioxide.

-solar panels that can be installed on the roofs of our houses.

-it is an infinite energy because the sun will there be for other 5 billion years



Disadvantages



Wind energy

- Quite **high installation cost**.
- The wind is relatively **unpredictable** so it is not possible to estimate a **payback plan**.
- Large wind farms have a strong landscape impact (**visual impact**).
- Noise pollution**.

Solar energy

- Solar energy has an **inconstant, power** depending on the season and on weather.
- The installation of a **photovoltaic system** is expensive
- It is not always possible to install a **private solar system**.
- enough area is required for the **installation of solar panels**.



This is a famous quote by the Italian scientist
Luca Mercalli:



*Il cambiamento climatico è
sotto gli occhi di tutti. ☹️☹️*

*Il riscaldamento globale è il
grande nemico generato
dall'uomo, non è un'ipotesi
per il futuro bensì un
fenomeno già in atto.*

Luca Mercalli

*Climate change is in
everyone's eyes.*

*Global warming is the great
enemy generated by man, it
is not a hypothesis for the
future but a phenomenon
already in place*

Luca Mercalli

Dejanira De Michele

Thanks for
your
attention



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