

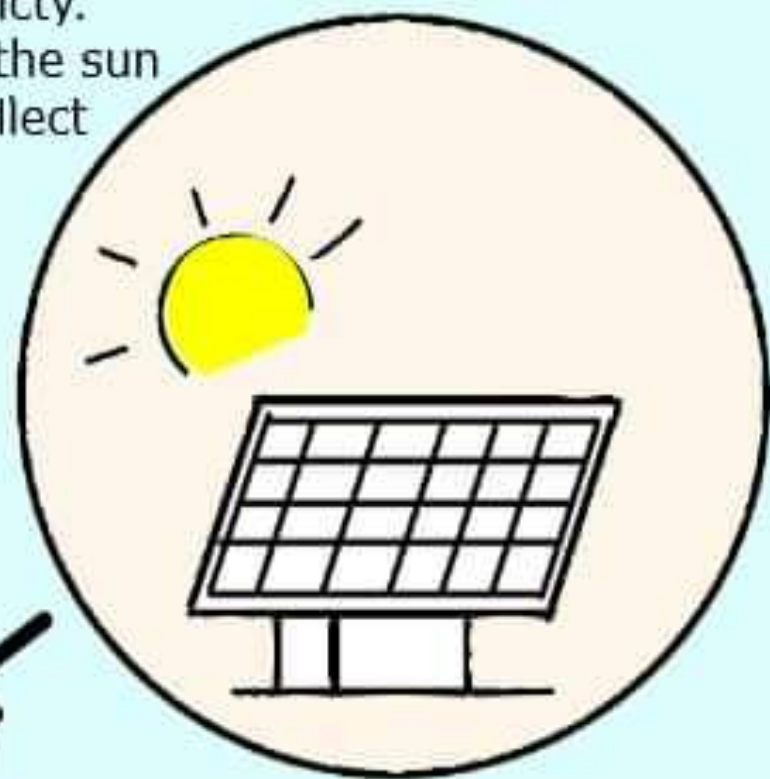


SUSTAINABLE CITY

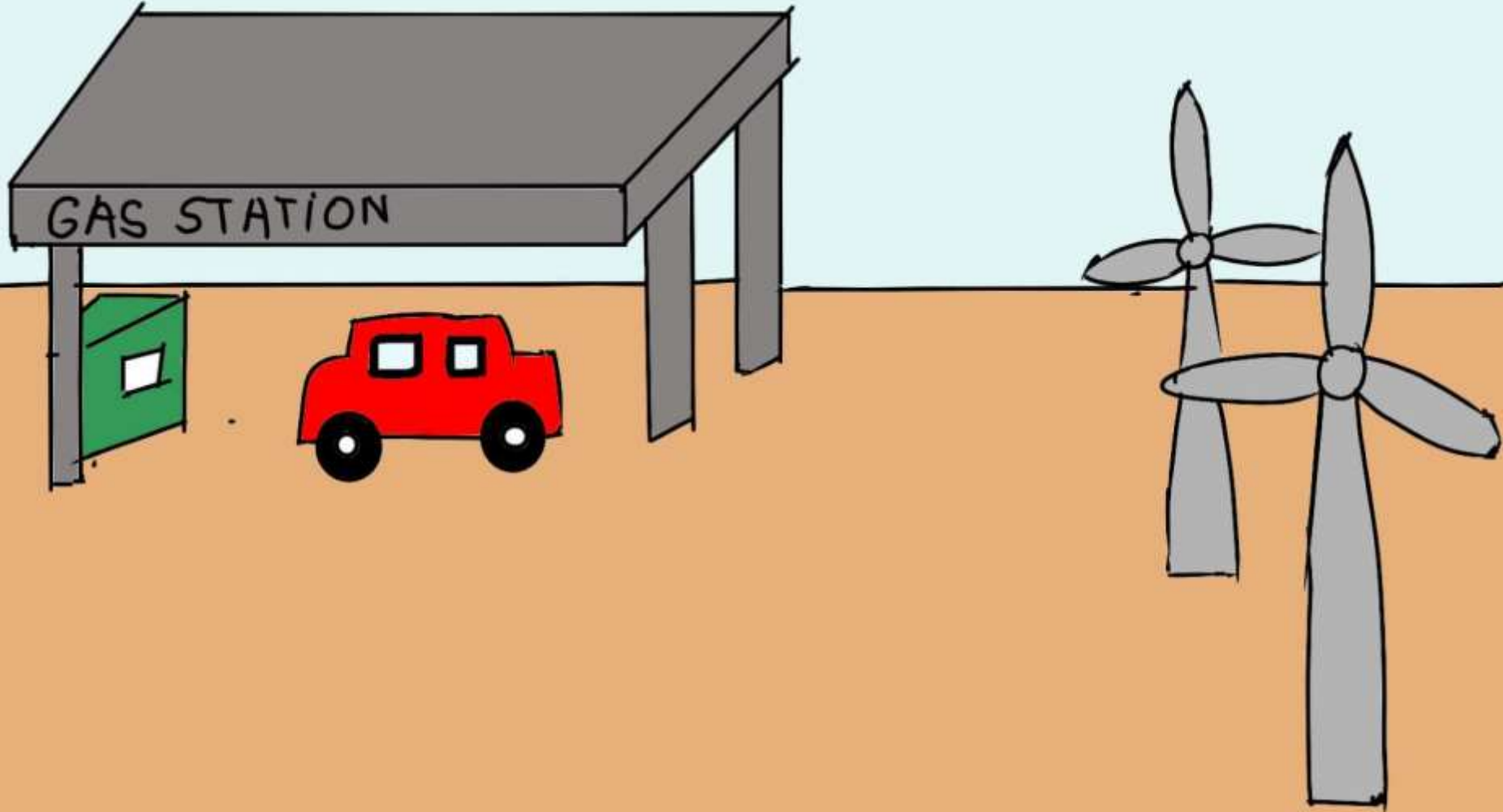
All of us have met and we discuss the problem of sustainable city. We have a lot of ideas but we want to show the most interesting concepts.



Solar pannels are used to generate electricty. We can use them at the hospital. Due to the sun the surfaces of photovoltanic batteries collect heat from the rays that fall on them and generate solar energy.



Wind turbines are used to generate electricity. We can use them at gas stations. Due to wind, the rotor starts to move and wind energy is generated



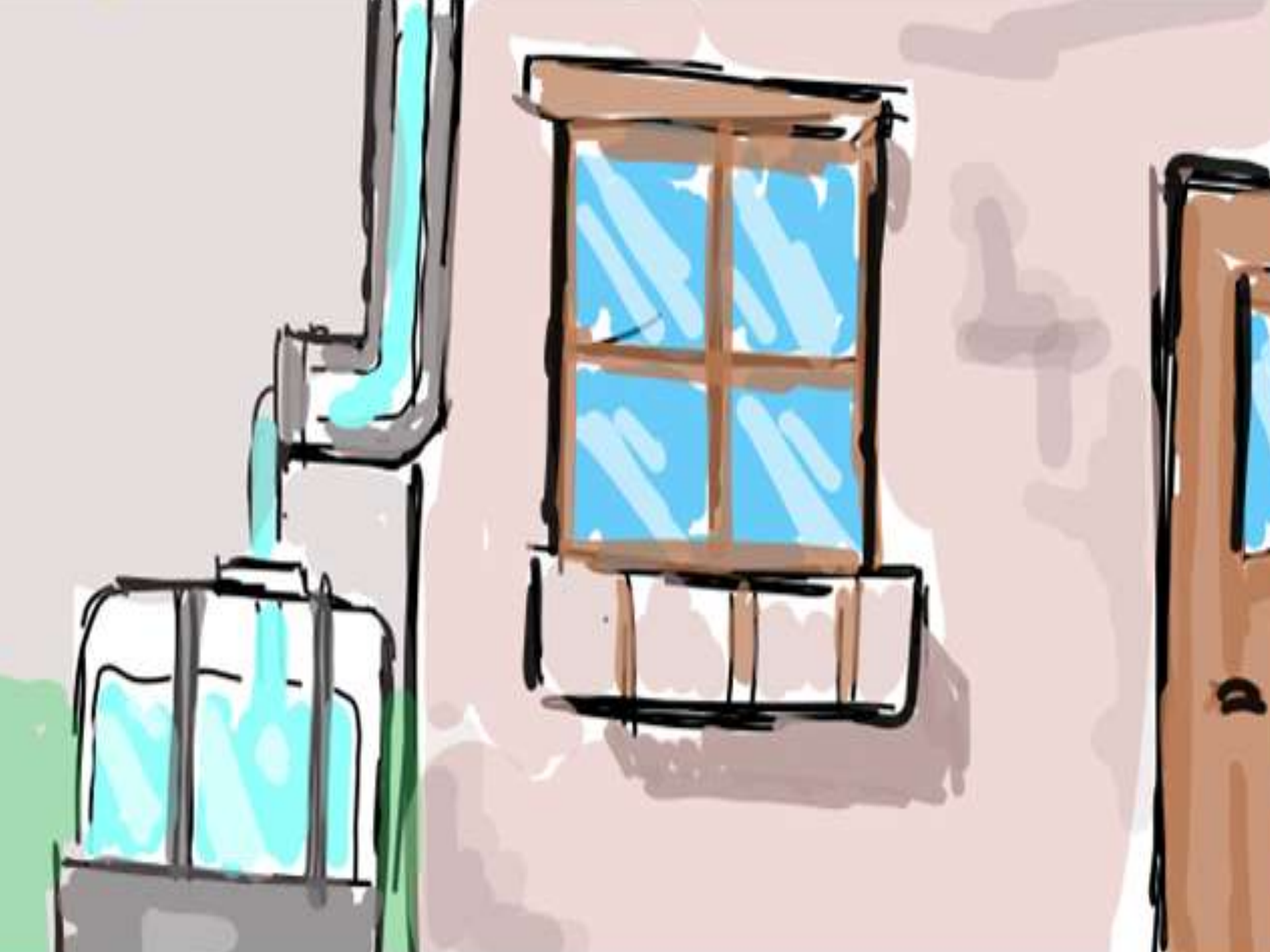
COLLECTING RAINWATER

With the worldwide water supply decreasing year by year, collecting natural rain water is an outstanding way to be kind to Mother Earth and be environmentally responsible.



How to collect rain water?

- Utilizing rain barrels to collect rain water is probably the most common water collecting method. You can place your rain barrels right under the down spouts on your gutters and thanks to it water will run-off from the roof straight to your barrels.
- You can also collect rain water by using things you already have around your home like buckets, child's swimming pools, watering cans, etc. Simply allow them to fill up and use the water within a short amount of time because if you wait too long mosquitoes may breed.
- There is one more option - you can install a rainwater collection system, which consists of big tanks that are under the ground. When it rains, the water is directed to the tanks and then when it needs to be used, there is a filter and a pump which pumps the water out. This type of collection system is much pricier and needs to be installed by a professional.



Uses for rainwater:

- watering gardens and plants
- showering
- washing car
- doing laundry
- flushing the toilet

Collecting rain water naturally is a wonderful idea to utilize free water that simply falls from the sky. You will find that being so resourceful not only helps out Mother Earth, but also gives you an accomplished feeling inside. You also get to experience decreased water bills.



WIND FARM

Wind power is usually generated using a wind turbine. Wind turbines are mechanical systems that convert kinetic energy which comes from wind into electrical energy. What is great, wind power is a renewable source of energy. Additionally, thanks to wind turbines city can reduce electricity bills. The power from them can be used in every place, which needs energy (for example in office buildings, schools, hospitals and sport centres).



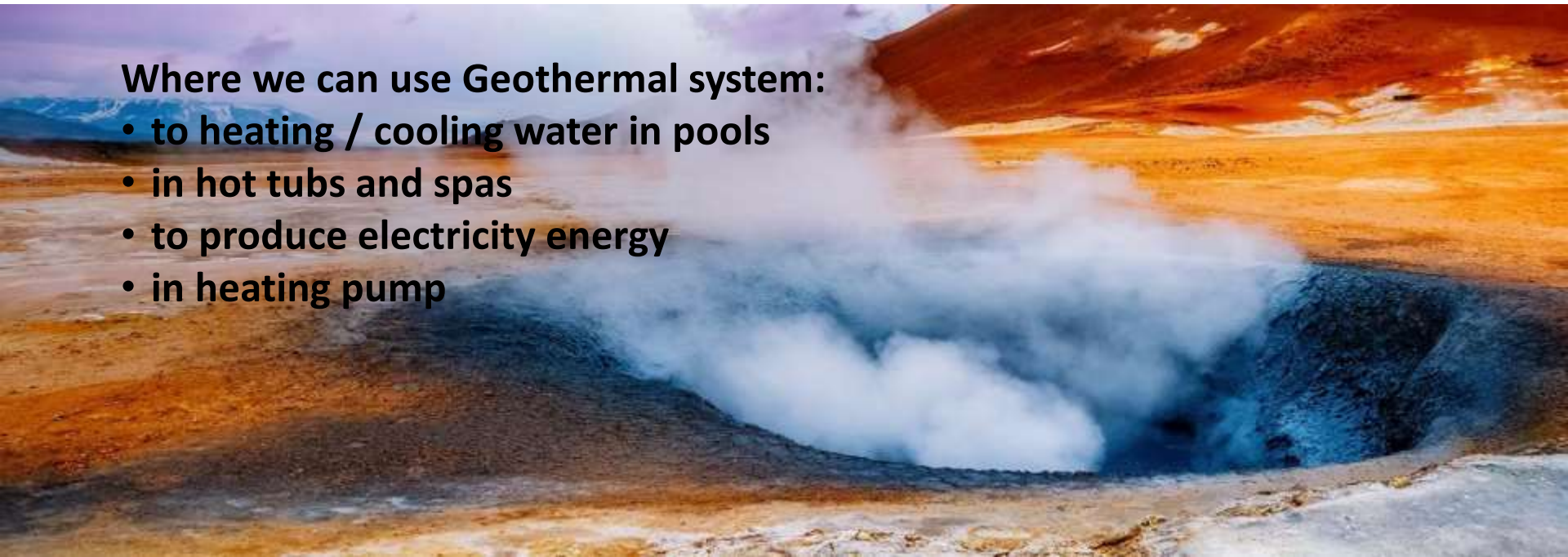
GEOTHERMAL ENERGY

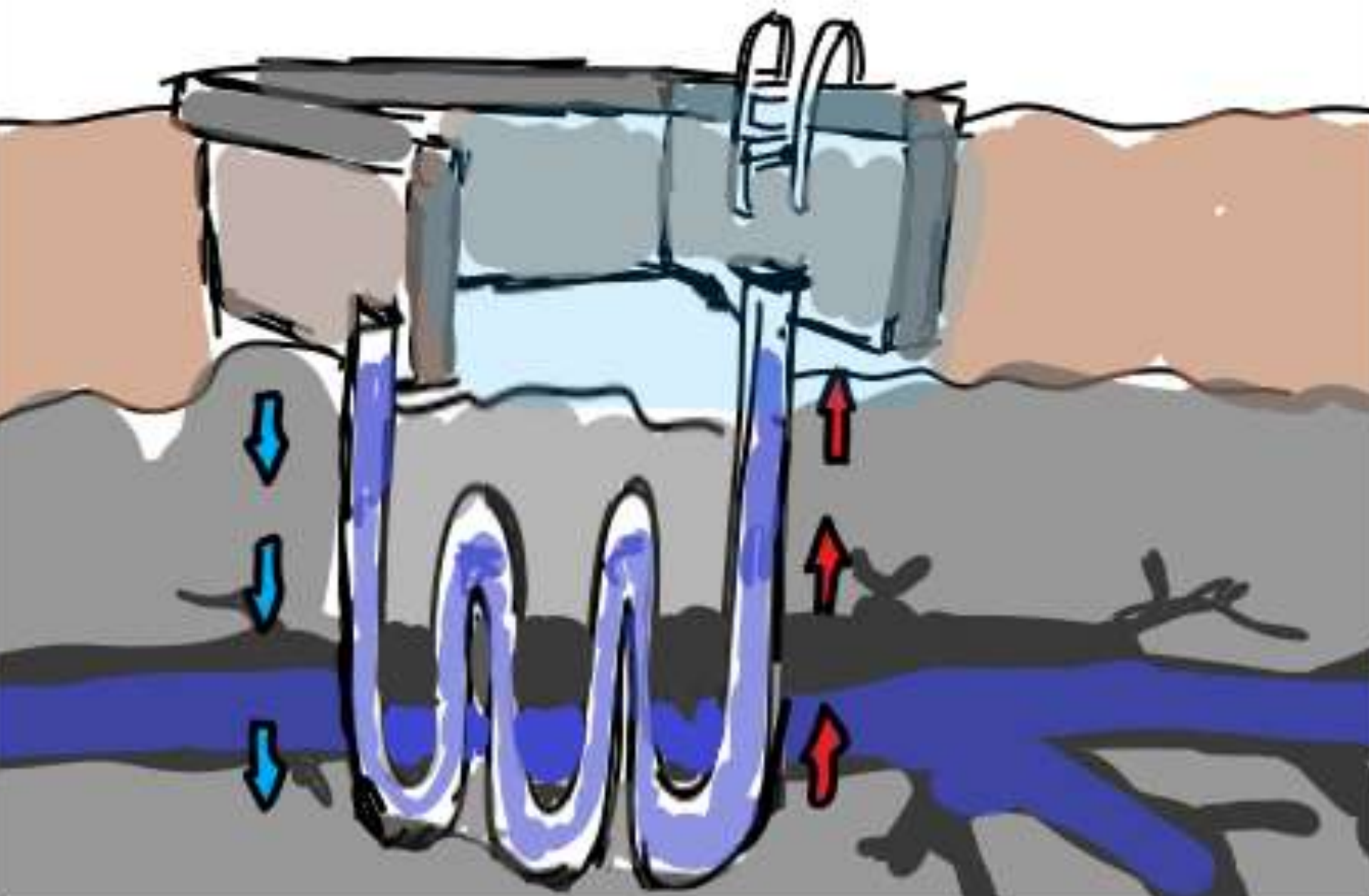
Geothermal energy is located in deep parts of our Earth and it is the most energy-efficient way to heat and cool. It conserves natural resources and doesn't involve the use of fossil fuels. The system also brings many benefits above using gas, electric or even solar pool heating units. That renewable source energy system can last up to two decades.

A heat pump and the Geothermal unit can cool the water as well as heat it. Using Geothermal cooling is an energy efficient way to lower the water temperature and it also reduces the amount of water lost through evaporation.

Where we can use Geothermal system:

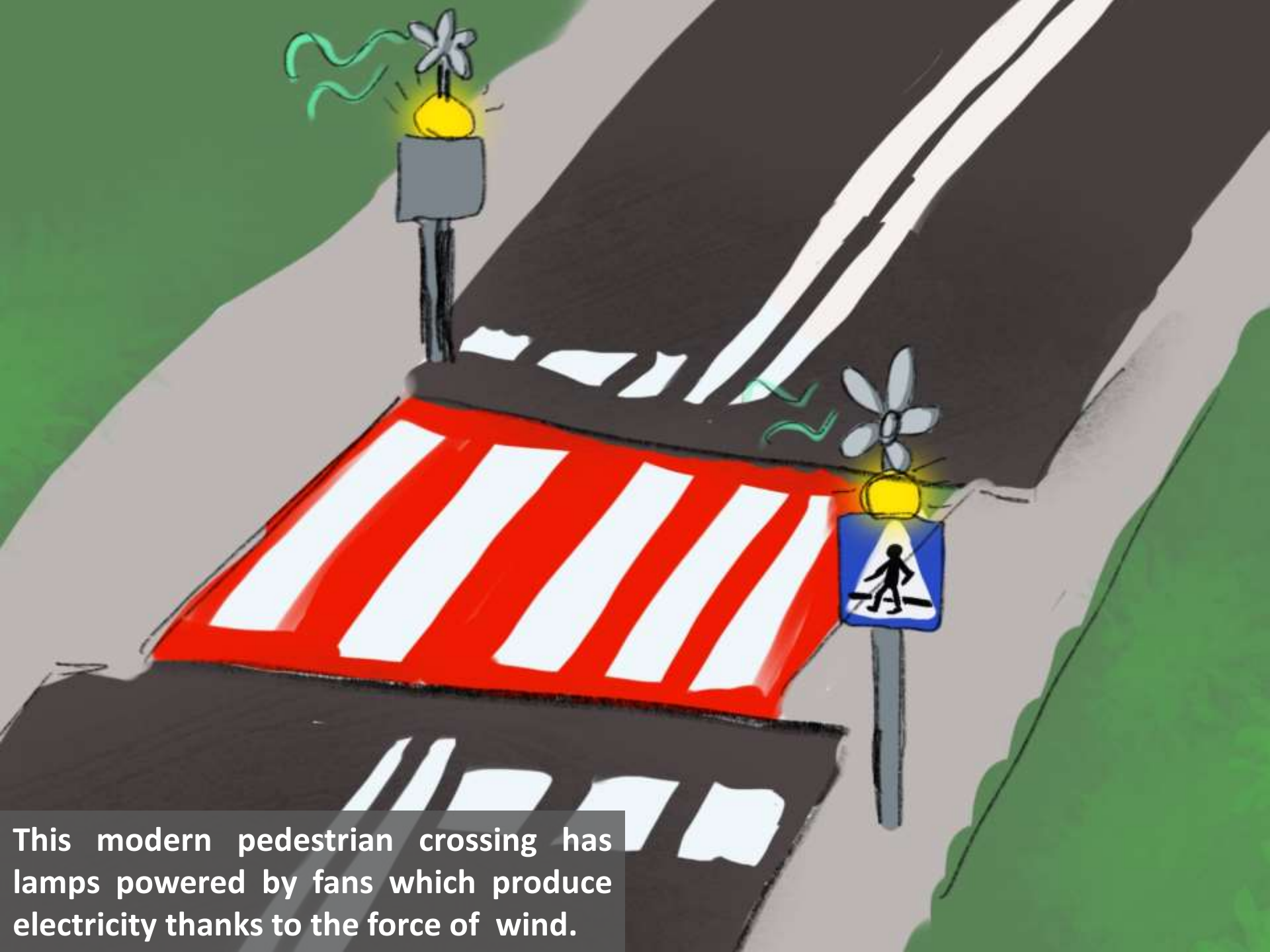
- **to heating / cooling water in pools**
- **in hot tubs and spas**
- **to produce electricity energy**
- **in heating pump**





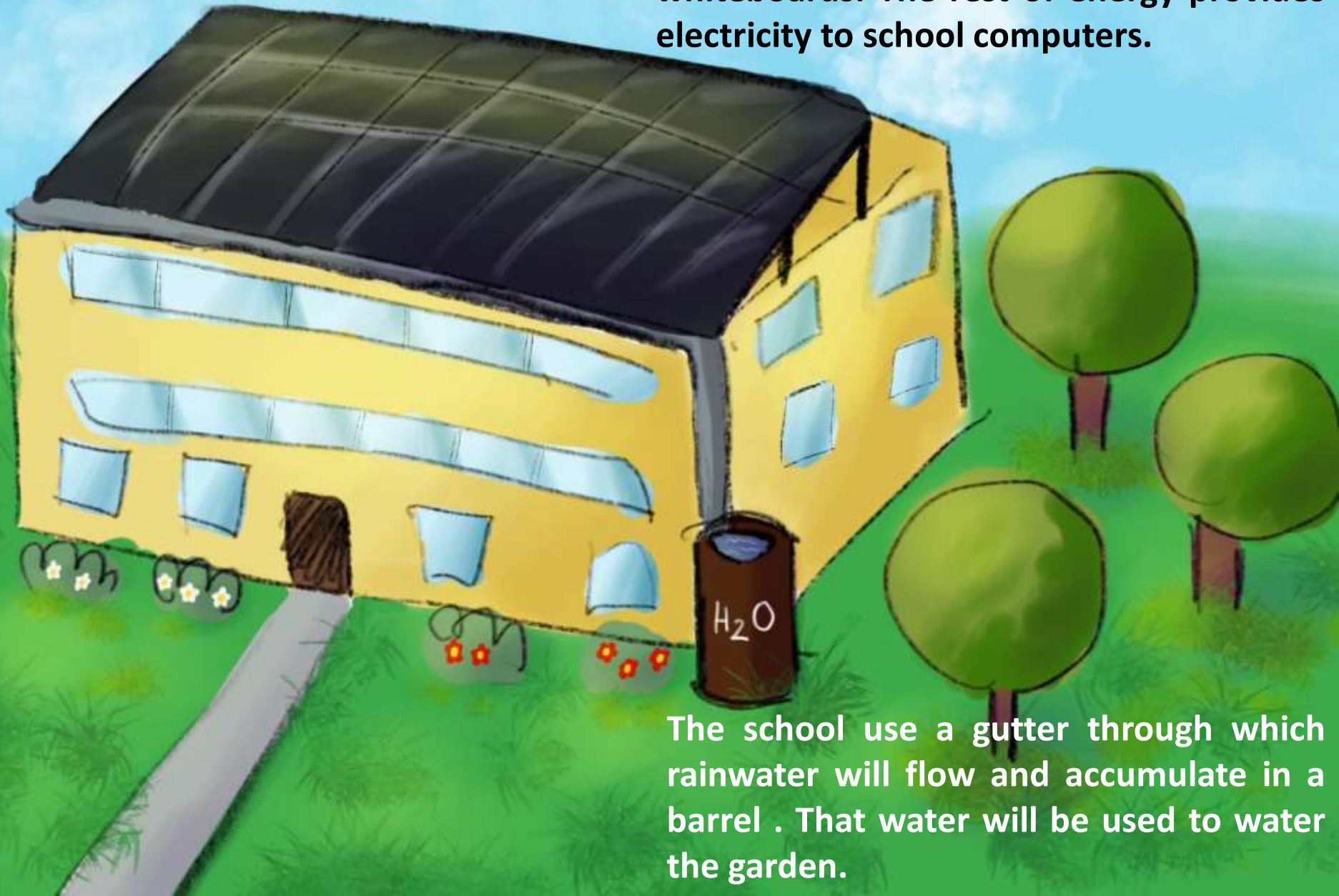
PRACTICAL IDEAS





This modern pedestrian crossing has lamps powered by fans which produce electricity thanks to the force of wind.

The school has got new solar panels. They are used to power up interactive whiteboards. The rest of energy provides electricity to school computers.



The school use a gutter through which rainwater will flow and accumulate in a barrel . That water will be used to water the garden.

THANK YOU FOR YOUR ATTENTION!

