



## GOAL 7: AFFORDABLE AND CLEAN ENERGY

'A rolling stone gathers no moss'  
[proverb from Greece]

### One day spent with Stéfanos from Greece

Geia! Eimai Stéfanos. Welcome to Tilos – I am glad you made it here. It is one of the 3.054 Greek islands. I am nine years old and need to hurry because I have to get to school. My mobile phone did not charge its battery last night and so my alarm didn't go off this morning. We had another blackout last night. I should get myself a proper alarm clock with batteries so that this does not happen again. Usually I eat a piece of toast and drink a hot chocolate for breakfast. Not today – you need electricity for that. I will just grab some figs – and let's go!

Here in front of our doorstep is our old diesel generator. We affectionately call him „our Emmi“. Emmi is quite old and often stops running. When he does work he is really loud and smells terribly of diesel. He is very easy to work, you fill in diesel at the top and electricity comes out at the bottom but not just electricity, also a lot of dirt and exhaust fumes.

Diesel obviously does not grow on trees here, it is crude oil that can be found deep beneath the earth's surface. The oil is pumped up on drilling rigs in the sea and then transported here in massive oil tankers. If you stand on the top of those cliffs over there you can see the big oil tanks pass by every other minute. Sometimes, when an accident happens on one of those oil tanks a thick oil film can be seen kilometers along the coast. This is a disaster for people, plants and animals. Luckily this has never happened here. But my grandmother always says: 'It is just a matter of time.'

Phew, although it is only 8 am the sun is already really hot. This is not unusual for this area. There are only very few days in the year when the sun does not shine. Why can't we use the strong energy from the sun and turn it into electricity? Our teacher has told us that it is possible to generate power through the sun using so-called solar cells and that wind power can be used to generate electricity. We have a lot of wind here.

When I grow up I want to become an architect so that I can build solar cells on every roof here in Tilos. Then all the kids can do their homework in peace and will not be disrupted by the loud generators. Everyone would have electricity at all times although nobody could use a power cut as an excuse for being late to school! But you can't have it all! I dream of a future where every person has clean energy and that the world is no longer polluted through the combustion of coal and oil.





## Affordable and clean energy – Support renewable energy, ensure energy access for all

Washing your clothes, cooking or using your laptop all needs energy and electricity but where does the energy come from? In Europe it just comes out of the socket in the wall but how is it generated? Usually this happens in large electrical power plants where energy is generated from wind, the sun or water or through the combustion of coal, gas and oil or through the splitting of atoms.

For a long period of time electricity generated by nuclear power stations was regarded as the cleanest and cheapest energy. However the radiation that is produced in these nuclear power stations is a big problem because it is a great health and safety risk. It is also really difficult to handle the nuclear waste that is produced. The highly radiated waste needs to be separately stored in the so called 'final repository' and even if it is stored there for thousands of years the radiation still remains. Over the years they have been in operation there have been a number of disastrous accidents with devastating consequences.

Most of the energy generated in Austria comes from fossil fuels such as crude oil, natural gas or coal. These substances have one thing in common, they are the deposits from dead plants and animals from over the many millions of years. However fossil fuels do have advantages; they aren't as dangerous as nuclear energy from a nuclear plant. That is why many cars run on petrol or diesel. However, these fossil fuels also have two very significant disadvantages; firstly as a result of the combustion of substances toxic gases are generated such as carbon dioxide (CO<sub>2</sub>). Carbon dioxide is an invisible gas which contributes to global warming. A second major disadvantage is that the supply of fossil fuels is not endless. One day all reserves will be consumed and when they are gone, they are gone.

One main goal therefore is the development of renewable energy for all. We are talking about environmental friendly power supplies where availability is unlimited – wind, solar and water power. Access to affordable power is very important for the development of a country. We do not only need power for our homes, we also need it for our industries which are responsible for the production of goods.

Innovative methods of developing and using energy is particularly important in the field of food production. Good use of water pumps, irrigation systems, machines and other special agricultural equipment can increase profits. By 2030 all people should have access to reliable, affordable and sustainable energy. We need to make more extensive use of solar, wind and water energy. The wastage of energy should be avoided.

### What can we do to help achieve this goal?

- You too can stop wasting! Here is a little bit of advice: You should make sure that you do not put warm food in the fridge. When you cook make sure that you remember to put a lid on your pan. This saves energy!
- Every year Children's energy week takes place in Vienna. In that week children and young adults from 8-14 years have the opportunity to discuss many things and for example talk to companies and ask them about their energy consumption. You can find more information here: [www.kinderenergiewoche.at](http://www.kinderenergiewoche.at)
- **Earth Hour:** On the 19th of March millions of people in the world switch off their lights between 8:30 and 9:30 pm. They do this to send out a message to show their commitment to protecting the world's climate. There are whole cities where people switch off all their lights, even at main tourist attractions. Light a few candles yourself and invite friends and family over for a climate friendly dinner party. More information here: [www.earthhour.at](http://www.earthhour.at)

**Lisa (14) from Kufstein, Tyrol** 'Together with my dad, I set up a wind wheel in the garden to generate power. I really don't understand why we have to use up the earth resources for that.'

**Martin (12) from Neusiedl/See, Burgenland:** 'I make sure that I always switch off the lights, when I leave a room.'