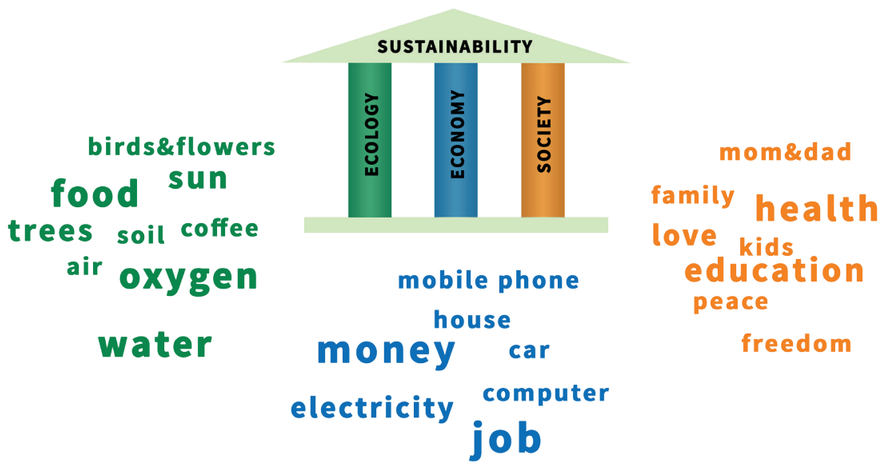
Sustainability

Sustainable development meets the needs of the present without compromising the ability of future generations to meet their own needs (Brundtland Commission, 1987).

Sustainability describes systems that:

- Keep our environment healthy,
- Make our living economically viable,
- Assure that we enjoy social equity.



Everything that we need in life can be found in the three columns of sustainability.







Renewable resources are sustainable because they are replenished by the environment. Examples are:

- Oxygen
- Fresh water
- Solar energy
- Animals & plants

We need energy in our daily life. Energy resources can be divided into renewable and non-renewable:

renewable energy:

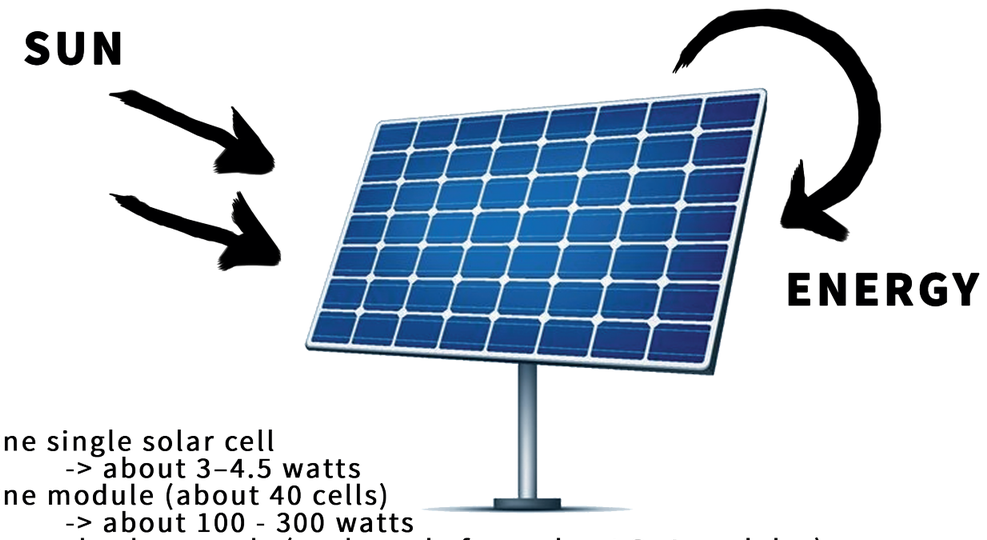
- Sun
- Wind
- Water
- Biogas
- Wood

non-renewable energy:

- Gas
- Oil
- Coal
- Nuclear energy

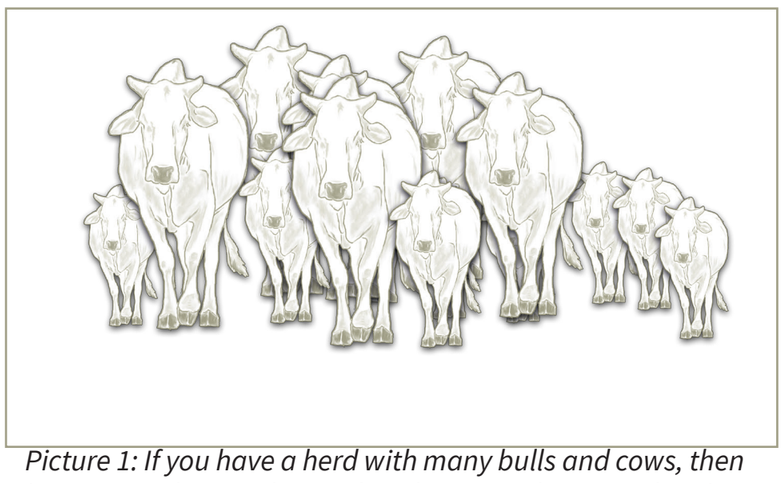
The sun has enough energy to supply our planet for the next 5 billion years.

In average, the solar panels which we are using today are able to use 15% of the sun‘s energy and convert it into electricity.

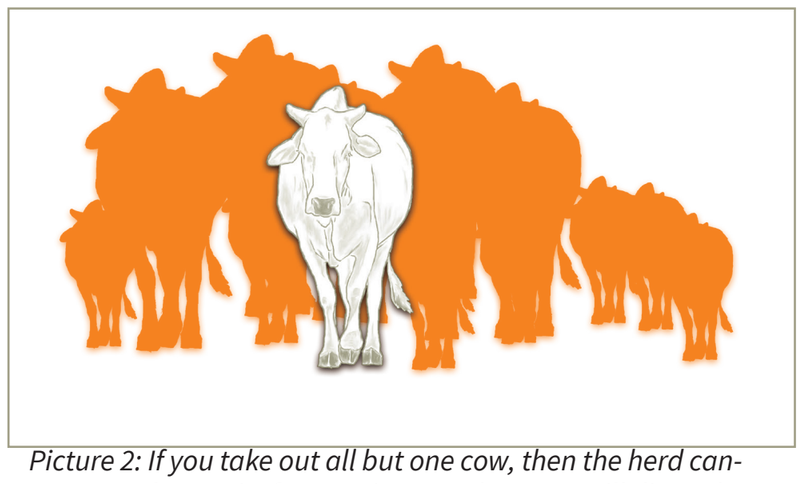


Solar energy is an example for renewable and sustainable resources.

Sustainable management means that we do not overuse our renewable resources. We can only use as much in a given time as it can replenish. For example:



Picture 1: If you have a herd with many bulls and cows, then it can reproduce and grow, but there are also enough animals for you to use.



Picture 2: If you take out all but one cow, then the herd cannot reproduce to its former size. Your last cow will die and you have no cows anymore.



Picture 3: If you take out some cows, but leave enough animals to reproduce, then the herd can replenish again. You will be able to continuously take out animals in the future.

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