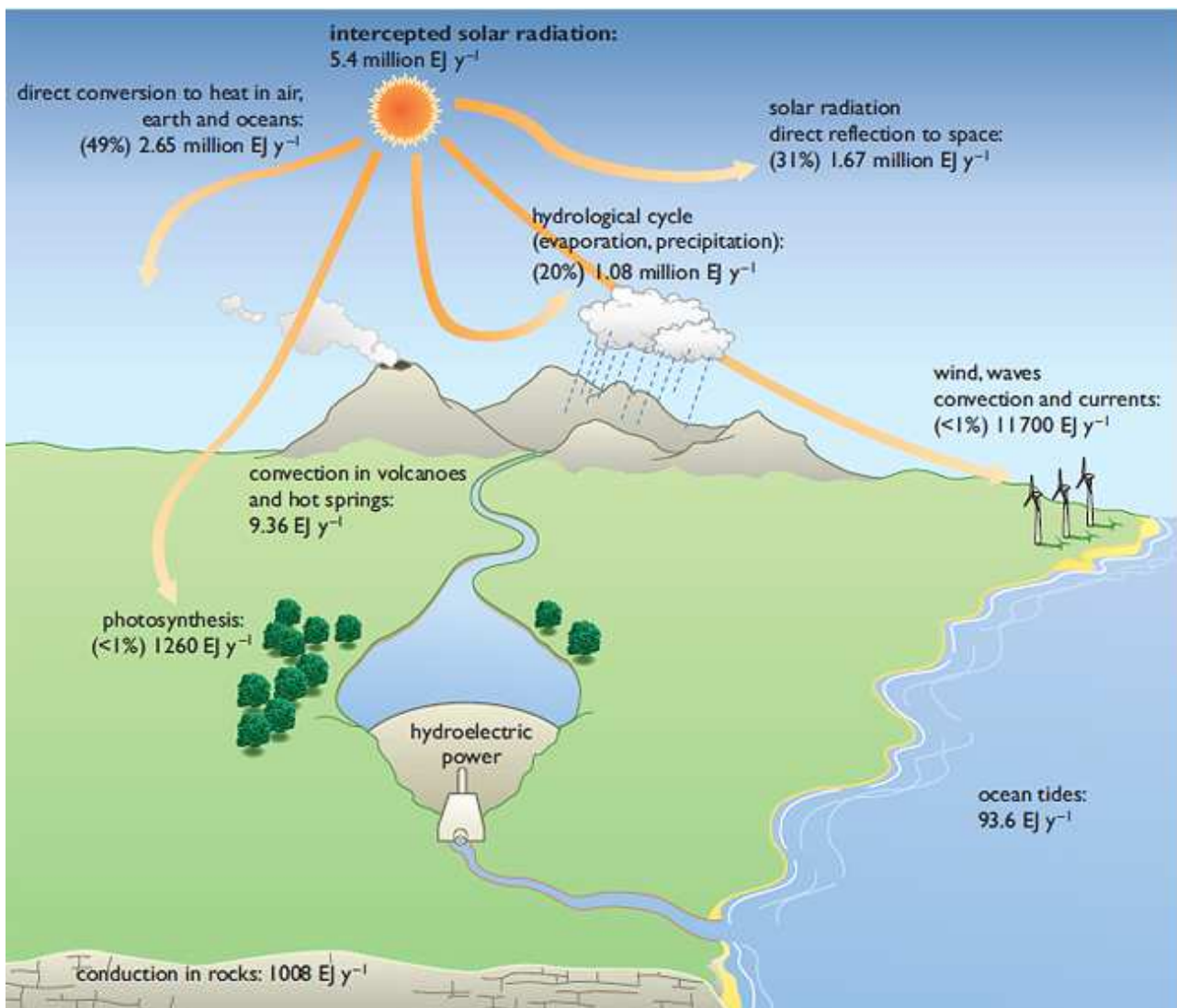


THE SUN: PRINCIPAL SOURCE OF RENEWABLE ENERGIES

Activity 1:

Look at the figure below, which summarises the origins and magnitudes of the Earth's renewable energy sources, and listen to the teacher's explanation, then answer to the question below.

EJ = Exajoule (EJ)
Equal to 1 quintillion (10^{18}) joules



1. How much Solar Energy hits earth per year?
2. How much is radiated back to the space?
3. How much is still available for use on earth?
4. What is the sun temperature surface?
5. What are the non-solar renewable energy sources shown above in the picture?

Activity 2:

POWER TOWERS

In groups of four, answer the following questions according what you hear in the power towers video.

1. What do power tower use to reflect sunlight onto a solar receiver?
2. What is the function of the fluid heated in the receiver?
3. What is the temperature in the receiver?
4. How is possible for CSP to collect and store heat to generate utility-scale electricity 24 hours a day?