Activity C4. ECONOMIC IMPLICATIONS OF SAVING ENERGY.
THE LANDSCAPE CREATED BY THE FORCES OF NATURE.
Porto Sant’Elpidio, Marche region, ITALY - February 2021

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ECONOMIC IMPLICATIONS OF SAVING ENERGY

Lifestyle and Overshoot day

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EARTH OVERSHOOT DAY: WHAT IS IT?

The **Earth Overshoot Day** indicates the day in which humanity consumes all the resources produced by the planet in the whole year.
Global Footprint Network develops tools to promote sustainability including the ecological footprint and biocapacity [https://www.footprintcalculator.org/](https://www.footprintcalculator.org/), calculates the number of days of the year that terrestrial biocapacity is able to provide for the human ecological footprint. The remaining days are called overshoot.

In the next slide you can see how to calculate it.
First we find the fraction of the year for which the generated resources are able to provide. Finally, multiplying by the number of days in a year we obtain the date of the Earth Overshoot Day =EOD

Define the quantities:

BIO = annual biocapacity of the planet Earth;
HEF = humanity's annual ecological footprint.

Finally you find: \( EOD = \frac{\text{BIO}}{\text{HEF}} \times 365 \)
Country Overshoot Days 2020
When would Earth Overshoot Day land if the world’s population lived like...

Source: Global Footprint Network National Footprint and Biocapacity Accounts 2019
Minimal exploitation of the planet Earth

Here are some values of the Ecological Footprint Calculator website, maintaining an ecological and, at the same time, sustainable lifestyle.

Having this lifestyle, there are pros and cons.

**pros:**
- life in favour of the environment and the planet Earth;
- vegan diet;
- the minimum of individual emissions;

**cons:**
- living in primitive conditions, i.e. in a small thatched house without running water, inhabited by more than 10 people.
Maximum exploitation of the planet Earth

Instead, here we present a lifestyle that is completely unsustainable and that makes the most of the Earth's resources.

Having this lifestyle, we can see pros and cons.

**pros:**
- you have a life to the fullest and you don't miss anything;
- do not think about waste;

**cons:**
- lifestyle harmful to the environment;
- the environment will soon run out of resources if we all adopt this lifestyle.
Emissions comparison

the emissions of an unregulated life

74.6
Your Ecological Footprint
(global hectares or gha)
172.9
Your Carbon Footprint
(CO₂ emissions in tonnes per year)
80
Your Carbon Footprint
(% of your total Ecological Footprint)

the emissions of an eco-sustainable life

0.5
Your Ecological Footprint
(global hectares or gha)
0.6
Your Carbon Footprint
(CO₂ emissions in tonnes per year)
43
Your Carbon Footprint
(% of your total Ecological Footprint)
Thanks for your attention