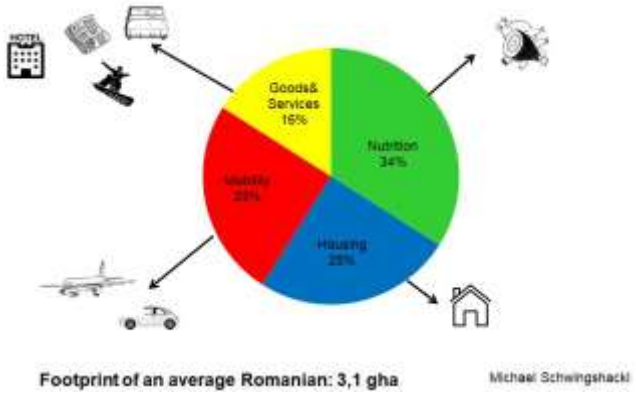
The Ecological Footprint of Housing – age group 1

Housing makes up a big part of our Ecological Footprint (Austria - 21%, Greece - 25%, Hungary - 30%, Romania - 25%).

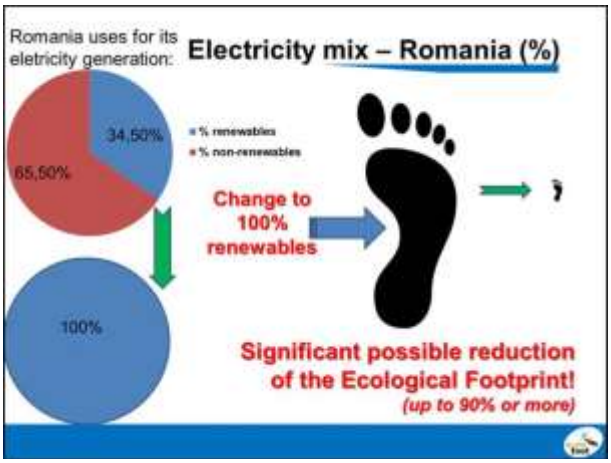


This part of the Footprint is caused by:

- the type of energy we consume for heating or electricity:
- the way we consume energy (habits, devices)
- the type of insulation and/or the energy production of our houses
- the size, type and location of the houses.

A world using all the energy obtained only from renewable sources will be a world:

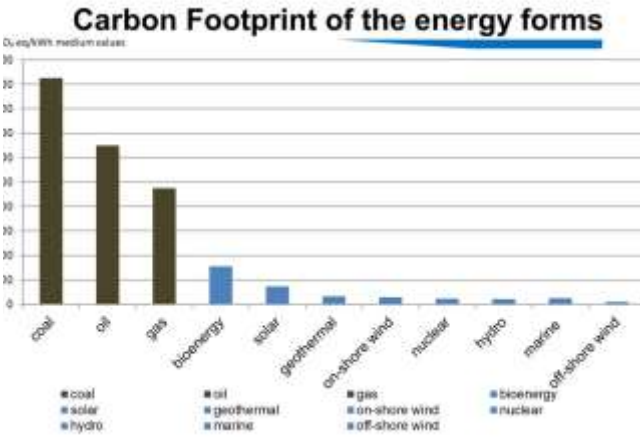
- without operating internal combustion engines!
- with no pollution generated by burning fossil fuels!
- where thermal power plants will have disappeared!
- without nuclear power plants – not a threat anymore!
- where energy problem is completely solved - by using only "clean" technologies!!!



THE TYPE OF ENERGY WE CONSUME

Renewable: sun, wind, water, waves, biomass, geothermal.

Non-renewable: fossil fuels like coal, oil, natural gas; uranium (nuclear energy)



The Carbon Footprint is, in general, variable, because of the multiple issues that occur during its generation. Medium values are considered;

- MOST renewables have lower Carbon Footprints than non-renewables. For the moment, the use of renewables is increasing, but far from its potential.

THE WAY WE CONSUME ENERGY

What can we do to save heat in our houses?

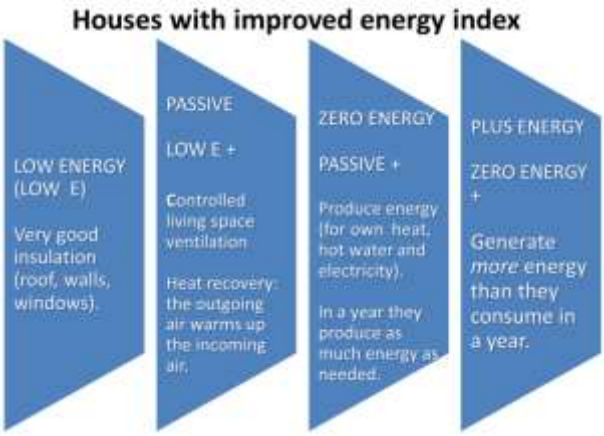
- keep the connecting doors closed! (between bedroom and lobby, living room and kitchen, staircase and corridors, etc.)
- ventilate the space naturally, with short and often intervals to keep the windows open - two-five minutes, as many times as possible;
- use a thermostat to the radiator. It can be used together with the overall thermostat with electrical programming, for the entire place.

THE TYPE OF INSULATION

The heating Footprint can be decreased by **thermal insulation** and modern technologies to almost **zero**. Without any loss of comfort, insulation decreases **substantially** the need for heating energy: a good **insulation** can save around **35%** of the average residential footprint.

Insulation reduces the expenses for heating during the winter season, but also the electricity consumption (air conditioning, ventilation) in the summer. And the indoor temperature is constant, keeping a healthy environment.

Energy index indicates the measured specific energy consumption of a building in kilowatt hours per year and sq. m living space - KWh/ (m^2 a). By the energy index, houses can be categorized as standard houses, with no improvements and huge energy consumptions, and houses with improved energy index:



THE LIVING SPACE

- **Smaller houses have a smaller footprint (at the same energy consumption habits and technology)!**
- If you compare the energy consumption for heating per m^2 of a **flat in an apartment block with more than 10 flats** to that of a **single house** (both have the same quality of isolation and its inhabitants the same energy consumption habits), the flat needs up to **1/3 less energy for heating**

WHAT WE CAN DO

- **Good insulation of our homes**
- **Switch to green energy**
- **GET ACTIVE FOR AN ENERGY TRANSITION!**

There are many **NGOs, online petitions, campaigns, events or local citizen-owned energy cooperatives** that promote renewable energy, housing insulation and other ways of consuming energy in our everyday life!

Find out if there this kind of groups in your area, support them (financially or by participating) and take part in changing the political framework!

THE FIVE FOOTPRINT RULES

1. **Enjoy a sustainable lifestyle!** Enjoy the good feeling of not living at the expense of others! Enjoy more time, more friends, more joy, more knowledge, more wisdom…
2. **Act together!** to create a sustainable world!
3. **Reduce meat and animal products!** A significant reduction in the amount consumed, prefer as much as possible products from organic farming, prefer seasonal products!
4. **Travel by train, bike and bus.** Flying - better never!
5. **Home green home!** Clever housing: smaller, well isolated, using renewable energy for heating and electricity, access to public transport!

* Footprint data calculated by Global Footprint Network. Footprint data refer to the year 2016 in the calendar year 2019 and therefore the world's population for the year 2016 (7.5 billion people) is needed for the correct calculation of the fair share.

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