

AN EARTHLY JOURNEY

OUR CARBON FOOTPRINT



Many of our environmental issues are directly related to our problematic interactions with nature. Human way of living has changed more since the middle of the 20th century than ever before in the history of our species. Because we are the ones responsible for many of the greatest environmental issues that we face we also have a responsibility to try and fix them. The problems are diverse and difficult but we should be able to solve them - including with a change to our individual approach to a way of living.



WE NEED A BALANCE BETWEEN CARBON DIOXIDE AND OXYGEN

- Carbon dioxide is a necessary component in our atmosphere for life on earth as we know it. This particular gas element lets rays from the sun enter the atmosphere but traps much of the heat that gets returned from our planet, blocking heat beams from Earth. This is what we call a greenhouse effect. Carbon dioxide is the most potent of our environment's greenhouse gases.
- During the last two centuries the strength of carbon dioxide has increased in our atmosphere. The prime reason for this being that we burn an incredible amount of carbon-based fossil fuels; coals, oil and gas. Historically a balance was kept between carbon dioxide and oxygen by plants and other photosynthetic beings that are able to bind the carbon dioxide but they are no longer able to keep up. To make matters worse we, the humans, cut down a much greater amount of forests and other woodland than we or nature is able to replenish.

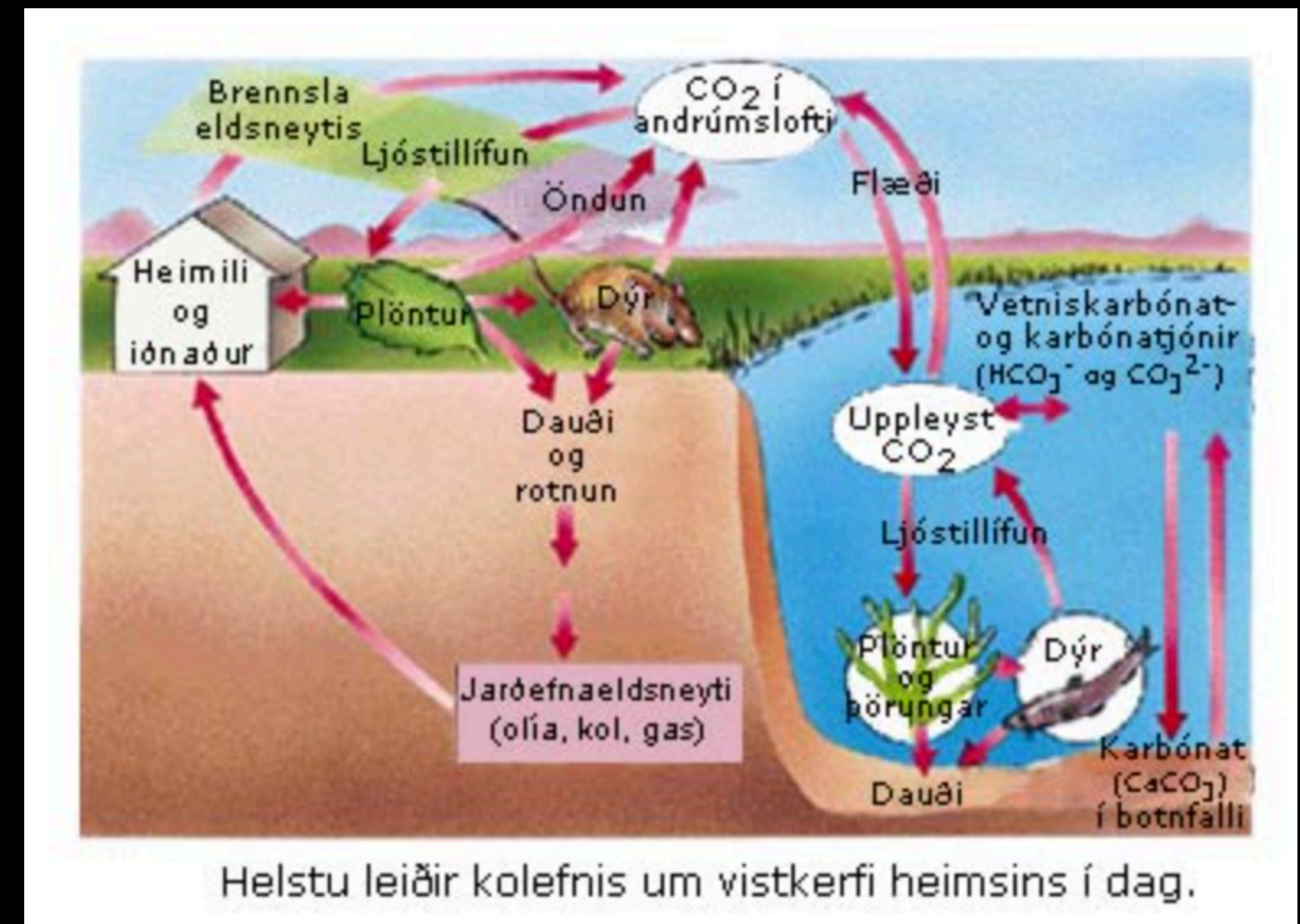
Photosynthesis (a plant cell)

Carbon dioxide + water + solar energy

=> glucose + oxygen

Burning (a plant cell)

Glucose + oxygen => carbon dioxide +
water + energy



IN THIS PROJECT WE ARE
INVESTIGATING:

OUR CARBON FOOTPRINT



A CARBON FOOTPRINT IS A MEASUREMENT
FOR BOTH DIRECT AND INDIRECT RELEASE
OF GREENHOUSE GASES CAUSED BY
HUMAN ACTIVITY.

In order to calculate our carbon footprint we are able to utilise a specialised carbon footprint calculator, made by Efla-engineers and OR-Reykjavík Energy supplier, that is able to calculate individual carbon footprints while taking into consideration factors unique to Iceland.

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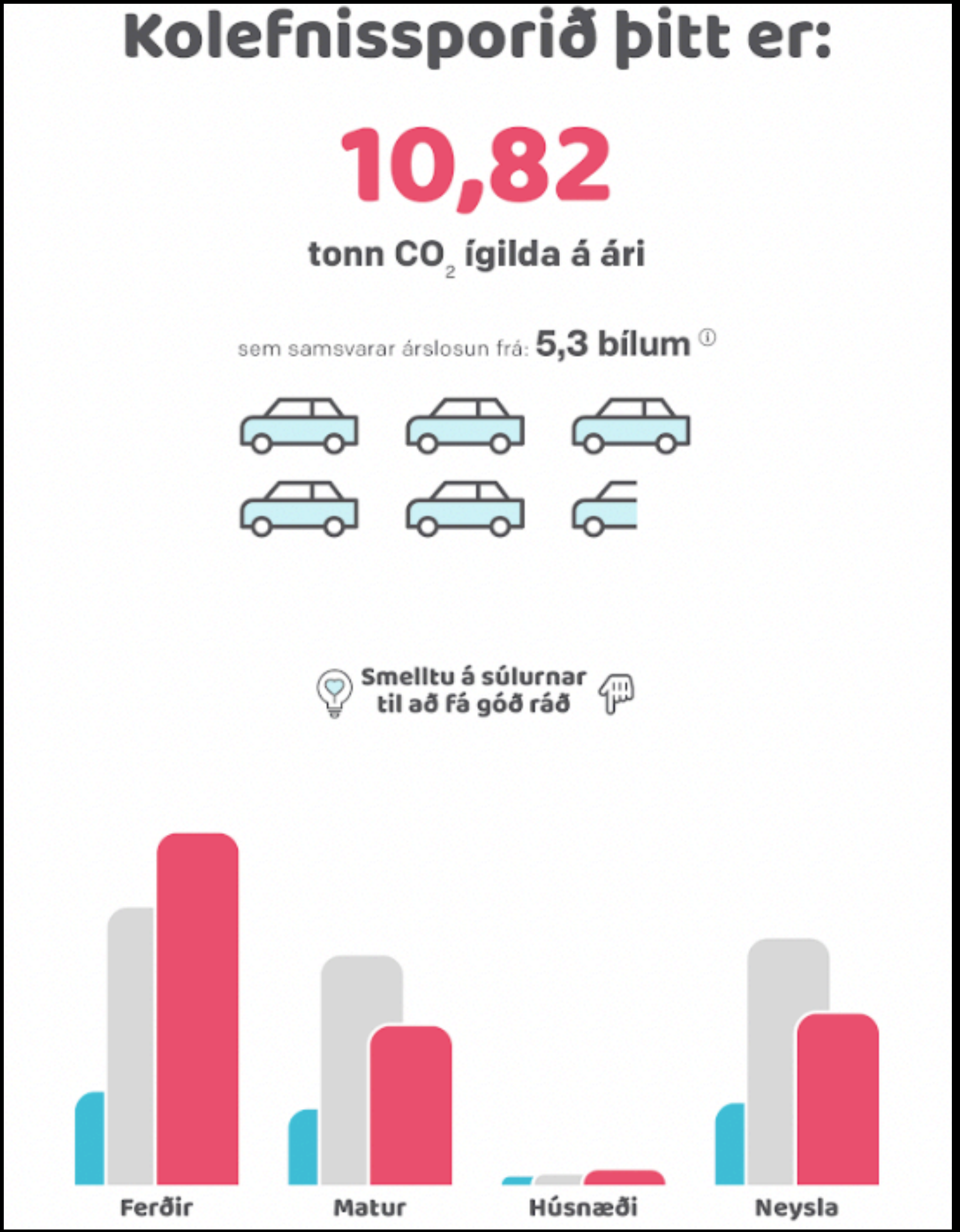
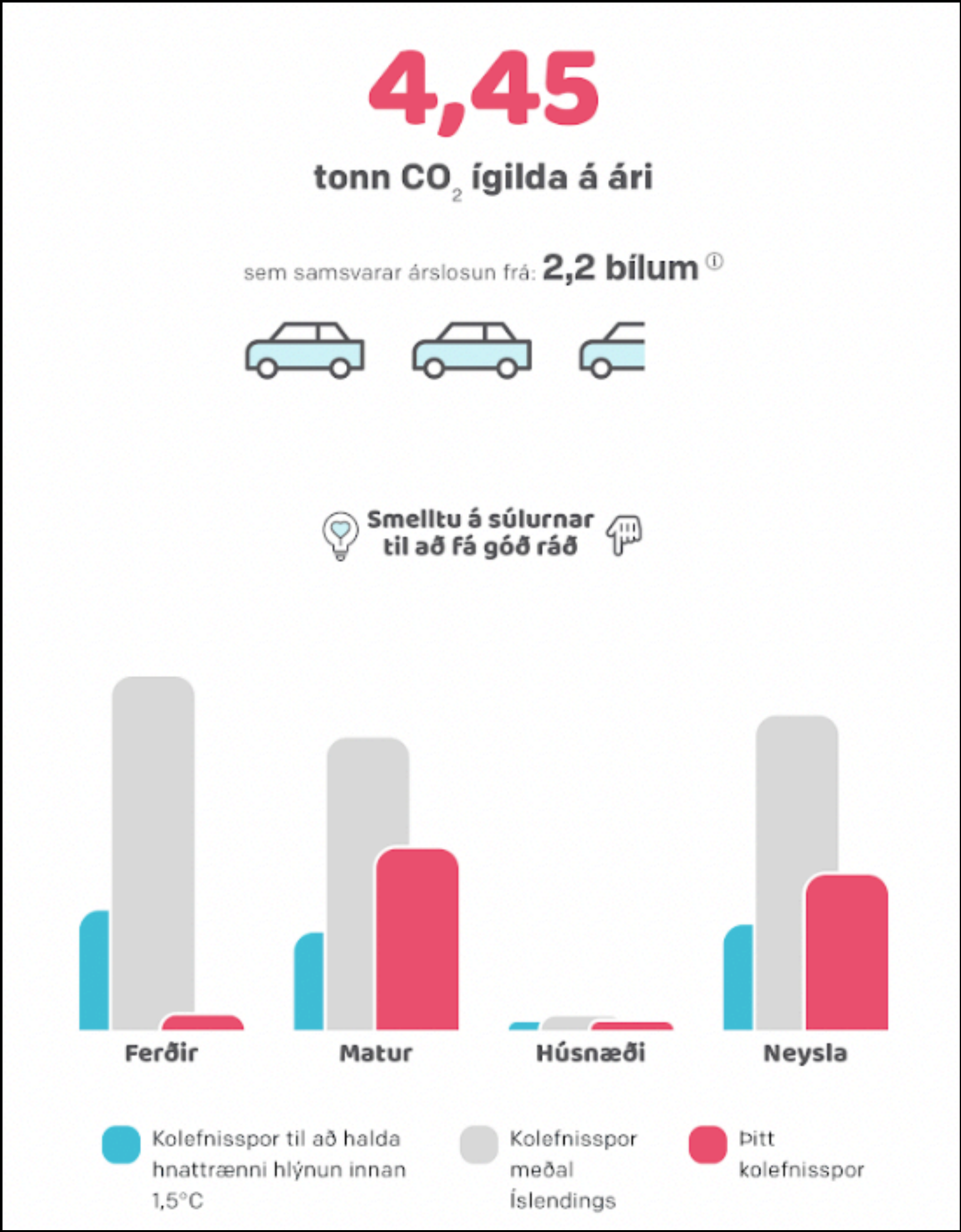
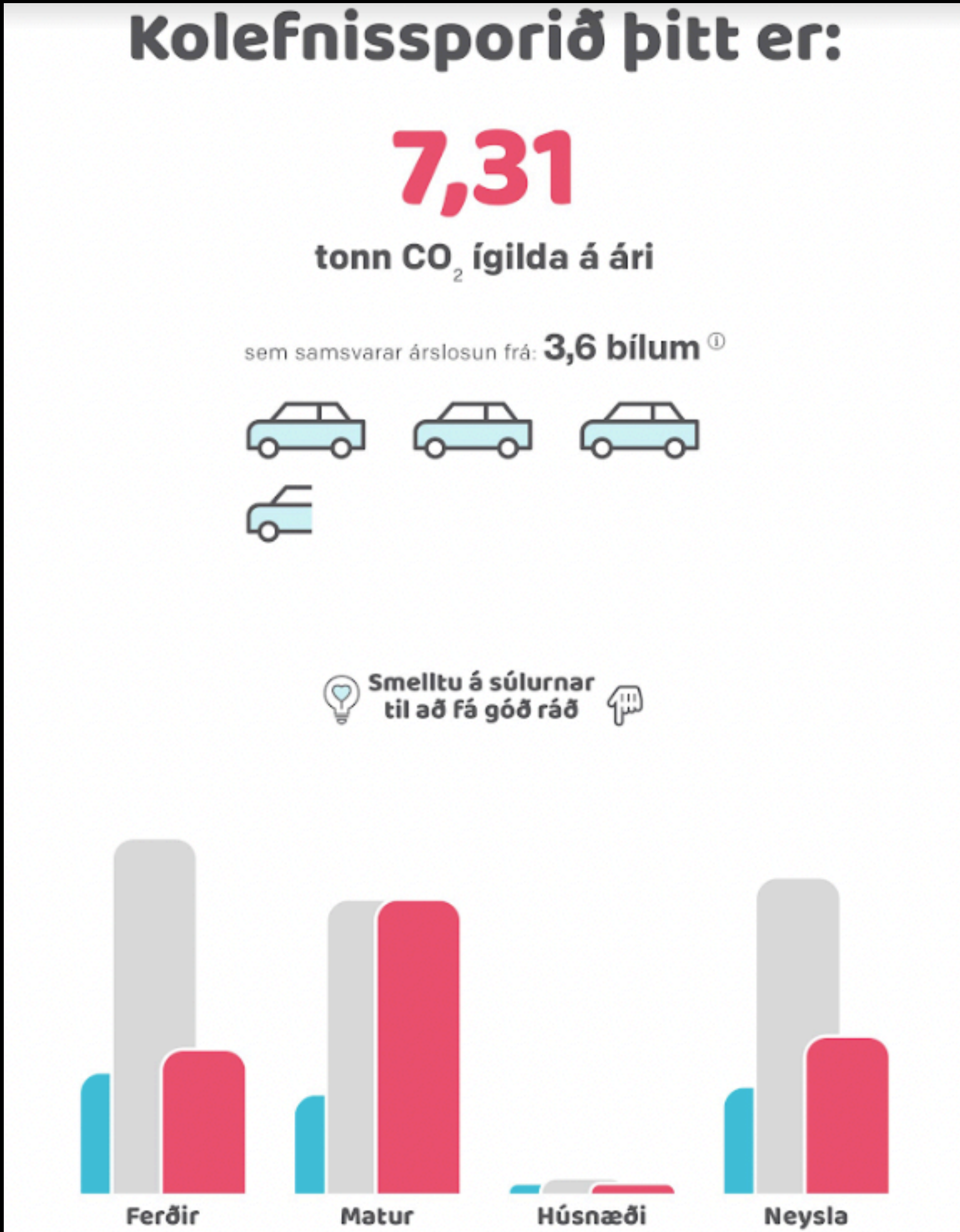
The carbon-calculation is divided into the consumption and habits that most influence the carbon footprint, such as consumables, service, travel, food and housing. Travel takes up a good portion since the majority of domestic travel is by way of carbon-fuel run engines but our choices regarding our diet, how we consume products and approach services can also have a great impact. In comparison with most countries the energy consumption of housing, especially in relation to general heating and electricity, has a relatively low impact since it is almost entirely derived from the domestic production of green and renewable energy. By making it easier for people to take enlightened decisions about their own consumption and ways of living we are taking an important step in resisting the climate crisis.

Follow the link to check your own carbon footprint. :)

[HTTPS://WWW.KOLEFNISREIKNIR.IS/
STEPS/1/2](https://www.kolefnisreiknir.is/steps/1/2)



MY CARBON FOOTPRINT - A SAMPLE OF STUDENT RESPONSES SHOWING HOW THEY (RED COLUMN) COMPARE TO THE AVERAGE ICELANDER (GREY COLUMN) AND HOW BIG THEIR CARBON FOOTPRINT SHOULD BE TO KEEP GLOBAL WARMING BELOW 1,5°C (BLUE COLUMN)



ERASMUS+

ÞINGEYJARSKÓLI SCHOOL IS A PARTICIPANT IN AN ERASMUS PROJECT. SIX MEMBERS OF THE SCHOOL WILL TRAVEL BY AIRPLANE TO FIVE DIFFERENT COUNTRIES (DENMARK, PORTUGAL, CYPRUS, ITALY AND TURKEY) OVER A THREE YEAR PERIOD AND WE WANT TO CARBON BALANCE THESE TRAVELS BY PLANTING TREES ON THE SCHOOL GROUNDS.

CAN YOU CALCULATE HOW MANY TREES WE WILL HAVE TO PLANT?

[HTTPS://KOLVIDUR.IS/](https://kolvidur.is/)



HOW MANY TREES DO WE HAVE TO
PLANT IN ORDER TO CARBON BALANCE
ÞINGEYJARSKÓLI'S ERASMUS PROJECT
PARTICIPATION?

| COUNTRY | FLY TIME | AMOUNT OF TREES |
|----------|----------|-----------------|
| DENMARK | 3:10 | 32 |
| PORTUGAL | 4:30 | 38 |
| CYPRUS | 6:08 | 62 |
| TURKEY | 6:55 | 70 |
| ITALY | 4:20 | 44 |

IN TOTAL: 246 TREES

