



WebQuest

“My Carbon Budget”

Advanced Level

Elaborated by the 1st Primary School of Rafina





TITLE OF THE WEBQUEST:

My Carbon Budget

LEVEL OF THE WEBQUEST

Advanced Level

## INTRODUCTION

Think about your family's budget: your parents work and bring home money. With that money, your family covers their needs: Food, bills, rent, heat, activities, etc. Every family makes sure that expenses do not exceed their income, because then there is a risk of running out of money and depriving family members of necessities.

Now imagine that your family is nature. Just as your parents make sure you have what you need, nature provides you with food, shelter, fresh air, and material goods. She has also temporarily offered you something special that you should be very careful with: Carbon Dioxide.

Carbon dioxide is a gas found in the atmosphere that is produced by many activities such as our breathing when we exhale, but mostly by the operation of machines that work by burning fossil fuels (e.g., petroleum, natural gas). Nature has entrusted carbon dioxide to you with great responsibility, because if you waste it thoughtlessly, it will accumulate in the atmosphere to such an extent that the natural balance will be seriously disturbed, and the Earth's ecosystems and the preservation of life will be in a difficult situation.



What amount of carbon dioxide has nature entrusted to you? At what point will the accumulation of carbon dioxide in the atmosphere threaten the natural balance? How will you manage this amount wisely without exceeding it? And finally, how will you succeed in eliminating the need to "consume" carbon dioxide in your life? The answers to the fascinating web search below...



## TASKS

A large chain of seafood restaurants called Gri-Gri wants to reduce the environmental footprint of its restaurants. To that end, it is launching a pupil's contest for the best proposal that will help the company achieve its goal, but also communicate to the general public its interest in protecting and improving the environment. The founder of the company is very sensitive to children, besides, as he says, he made his first money selling pebbles on a street corner, which he painted himself during the summer. For this reason, he wants to give pupils in grades 5 and 6 the opportunity to learn about the business sector at an early age.



You and your team decide to enter the contest. Your goals are:

- (a) come up with a proposal for the company on what it can do to reduce the carbon footprint in its restaurants; and
- (b) design and implement the homepage for the restaurant's website where you showcase what the company is doing to protect the environment.

If your team prevails in the competition, the company will sign a contract with you and hire you permanently.

Good luck!





## PROCESS

With the help of your teacher, your team gets to work right away. First, you give your company a name. After a discussion among the members of your company, you decide to follow the following steps in your work: (a) Gather information on what a carbon footprint and carbon footprint budget is, (b) Research what other businesses and restaurants are doing to reduce carbon footprint, (c) Investigate energy footprint from the moment, seafood is caught to the time it ends up on our plate, (d) Create a list of suggestions for the company, and (e) Design and implement the company's homepage highlighting its carbon/energy footprint reduction policy.

### STEP 1. What is a carbon or energy footprint?

According to your plan, first check out the following websites to find out what an energy footprint is:

- What is carbon footprint? <http://gr.dsorganic.com/services/carbon-footprinting-services/carbon-footprint/>
- How can I reduce my own carbon footprint? [https://europa.eu/youth/get-involved/sustainable%20development/how-reduce-my-carbon-footprint\\_el](https://europa.eu/youth/get-involved/sustainable%20development/how-reduce-my-carbon-footprint_el)
- How can we achieve zero carbon emissions by 2050? <https://www.europeanbusiness.gr/page.asp?pid=9006>
- How much CO2 do you emit into the environment? <https://www.heron.gr/co2-footprint/>
- Reduce your energy footprint: <https://entaxi.webnode.gr/products/meioste-to-energeiako-sas-apotypoma/>
- How can we reduce or carbon footprint? <https://www.ertnews.gr/eidiseis/epistimi/evzoia/perivallon/pos-mporoyme-na-meiosoyme-to-anthrakiko-mas-apotypoma/>
- Green diet: <https://www.benatura.gr/green-diet-how-to-reduce-your-carbon-foot-print/?lang=el>
- Atmosphere- Carbon budget: <https://delhipages.live/el/%CE%B4%CE%B9%CE%AC%CF%86%CE%BF%CF%81%CE%B1/carbon-budget>
- Climate Clock: When will the 'carbon budget' run out? <https://www.thepresident.gr/2020/09/30/climate-clock-pote-tha-exantlithei-o-quot-proypologismos-anthraka-quot/>

### STEP 2. How do companies care about reducing their carbon footprint?





Next, research how different companies are trying to reduce their carbon/energy footprint on the following websites:

- BOSH: <https://www.bosch.gr/news-and-stories/climate-actions/>
- Kontzoglou Bros: <https://www.kontzoglou.gr/articles/250/anthrakiko-apotupwma.html>
- Olive oils carbon footprint: <https://www.sellas.gr/%CE%AC%CF%81%CE%B8%CF%81%CE%BF/case-study-%CE%B1%CE%BD%CE%B8%CF%81%CE%B1%CE%BA%CE%B9%CE%BA%CF%8C-%CE%B1%CF%80%CE%BF%CF%84%CF%8D%CF%80%CF%89%CE%BC%CE%B1-%CE%B5%CE%BB%CE%B1%CE%B9%CE%BF%CE%BB%CE%AC%CE%B4%CE%BF%CF%85/60>
- Faber-Castell: <https://www.faber-castell.gr/company/our-global-commitment/environmental-protection/positive-carbon-footprint>
- Apple is committed to zero carbon footprint in its supply chain by 2030: <https://www.isquare.gr/blog/apple-zero-carbon>
- The Company "Prasino Ladi (Green Oil)" pioneers in reducing the Country's Energy Footprint: <https://www.energia.gr/article/162414/h-etaireia-prasino-ladi-protoporei-sth-meiosh-toy-energeiakoy-apotypomatos-ths-horas>
- Lidl: <https://corporate.lidl.com.cy/el/media-center/pressreleases/iso-500012?startdate=&enddate=&search=%CE%B5%CE%BD%CE%B5%CF%81%CE%B3%CE%B5%CE%B9%CE%B1%CE%BA%CF%8C+%CE%B1%CF%80%CE%BF%CF%84%CF%8D%CF%80%CF%89%CE%BC%CE%B1>
- Sani Resort: The first hotel in Greece with zero carbon footprint: <https://www.newmoney.gr/roh/palmos-oikonomias/tourismos/sani-resort-to-pto-xenodochio-stin-ellada-me-mideniko-apotipoma-anthraka/>
- "El. Venizelos" airport prioritizes actions for the environment: <https://www.capital.gr/epixeiriseis/3369156/oi-draseis-gia-to-periballon-sto-epikentro-tou-el-benizelos>

With the help of your teacher, you can visit or have a video conference call with the managers of one of these companies or other companies that you know have a policy to reduce their carbon footprint and get more details about how they operate.

### STEP 3. The carbon footprint from fish catches to plate

In this step, you will explore how the restaurant industry is trying to reduce its energy footprint, specifically in restaurants that specialise in seafood. Follow the links below to learn about:

- Trends in Restaurants that will dominate in 2020: <https://hotelmag.gr/hotel-trends/%CE%BF%CE%B9-%CF%84%CE%AC%CF%83%CE%B5%CE%B9%CF%82-%CF%83%CF%84%CE%B1-%CE%B5%CF%83%CF%84%CE%B9%CE%B1%CF%84%CF%8C%CF%81%CE%B9%CE%B1-%CF%80%CE%BF%CF%85-%CE%B8%CE%B1-%CE%BA%CF%85%CF%81%CE%B9%CE%B1%CF%81/>
- Green restaurants in the spotlight: <http://carbongreece.blogspot.com/2012/03/o.html>
- Criteria for classifying a restaurant as green: <https://www.inkefalonias.gr/koinonia/12111-kritiria-gia-to-xarakterismo-enos-estiatoriou-os-prasino>
- Responsible food consumption: [https://foodaware-project.eu/images/Responsible\\_Food/EL/5%20Responsible%20Food-EL.pdf](https://foodaware-project.eu/images/Responsible_Food/EL/5%20Responsible%20Food-EL.pdf)





- Fish, fish oil and sustainable fisheries: <https://www.mednutrition.gr/portal/lifestyle/diatrofi/8095-psaria-ixthylaia-kai-viosimi-alieia>
- WWF Fin Print Game: <https://www.wwf-finprint.org/gr>

## STEP 4. Our suggestions

Armed with knowledge of the energy/carbon footprint and how to limit it, prepare a list of suggestions to the “Gri Gri” company. You can use the following template:

**PROPOSAL TO REDUCTION OF THE CARBON FOOTPRINT IN THE CHAIN OF "GRI GRI"  
RESTAURANTS  
FROM THE CONSULTING COMPANY... (the name you gave to your team) ...**

- (Suggestion A)
- (Suggestion B)

## STEP 5. The Restaurant Website

It's time for you and your partners to showcase Gri Gri's efforts to reduce the carbon footprint of its restaurants.

First, consult several seafood restaurant websites to get ideas for your own website:

- <https://psarades-restaurant.gr/>
- <http://panoramarestaurant.gr/>
- <https://psarokokkalo.restaurant/>
- <https://psaromania.gr/>
- <http://gialosrestaurant.gr/>

Next, decide which of the suggestions you made in the previous step you want to include on your website.

Finally, with the help of your teacher, use one of the following web platforms to create the company's home page:

- <https://ukit.com/>





- <https://www.weebly.com/>
- <https://www.wix.com/>
- <https://www.doodlekit.com/>

## EVALUATION

Test the knowledge you gained from this WebQuest by taking the quiz found at the link:

<https://quizizz.com/join?gc=09206465>

## CONCLUSION

Congratulations to you and your team! You have worked together in the spirit of teamwork and the result of your work shows that you have understood what a carbon footprint means and what the "Gri Gri" restaurant chain can do to reduce its footprint and show responsibility towards the environment. In fact, the website design is exemplary and presents the work of "Gri Gri" restaurants to the public in an attractive and analytical way. The CEO of the company is enthusiastic about you as you remind him of himself when he was a primary school student himself. We would like to inform you that the company "Gri Gri" is hiring you!





# GRETA

**Challenge-based Learning in Primary Schools for Climate Change Awareness**



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