

STUDYING ABROAD SUSTAINABLY in SPAIN



QUICK TIPS

- Fly less, bus (and train) more.
- Use your own energy.
- Modify your diet.
- Reduce, recycle, compost.
- Conserve energy.
- Ask the locals.
- Investigate the impact.



PRELIMINARY NOTES:

I wish you the best of experiences studying abroad and hope what I learned during my study abroad term in Seville will help you live more sustainably in Spain. My objective is to get you thinking about ways to incorporate sustainable practices into your study abroad lifestyle. I'll also be including some take-aways from living in Italy and China during the summer after my first and second years at Harvard.

MAJOR SUSTAINABILITY ISSUES:

TRAVEL—FLY LESS, BUS (AND TRAIN) MORE!**

Traveling is one of the best parts about being abroad. However, there are more and less sustainable options. Flying is by far the most carbon-intensive form of transport: “Aviation accounts for about 2 percent of global greenhouse gas emissions.”¹ Check out the flight emissions for your itineraries at www.atmosfair.de/en/offset/flight/

Before you head on that flight to Budapest or Tokyo for the weekend, think locally and regionally. Is there a town nearby that you don't ever see yourself coming back to see? I traveled a lot, but I stayed mostly in Southern Spain and Portugal, which allowed me to navigate by bus or train.

TRANSPORTATION—USE YOUR OWN ENERGY!**

Public transportation varies by location. Most major cities, like Barcelona and Madrid, have great systems. Seville had electric buses that helped connect the city, as well as shared bikes that were cheap and convenient, a system that is common in lots of cities around the world. Taxis and Ubers might seem easier or quicker, but consider using public or shared transport systems, to cut down on those emissions (and costs) too!

DIET—MODIFY YOUR DIET!

Spain is famous for its Iberico ham, and it's true - it tastes amazing! But red meat, specifically lamb and beef, are high on the carbon-producing list of foods. As someone who usually follows a vegetarian diet, I was pleasantly surprised by how little meat was served in my homestay and how easy it was to request alternative proteins for some meals. Note the higher levels of CO₂ emissions some foods cause and be conscious of your choices. Check out the chart below to understand how diets vary regarding their CO₂ emissions.²

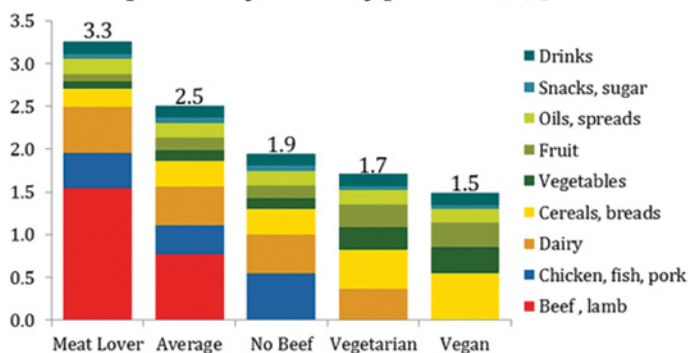
** Always prioritize your personal safety when choosing your road travel or public transportation options. Ensure the transportation is safe, pick reputable companies, travel during daylight hours, and be aware of opportunistic crime.

¹ www.vox.com/energy-and-environment/2019/1/11/18177118/airlines-climate-change-emissions-travel

² www.greeneatz.com/foods-carbon-footprint.html



Foodprints by Diet Type: t CO₂e/person



Note: All estimates based on average food production emissions for the US. Footprints include emissions from supply chain losses, consumer waste and consumption. Each of the four example diets is based on 2,600 kcal of food consumed per day, which in the US equates to around 3,900 kcal of supplied food.

Sources: ERS/USDA, various LCA and EIO-LCA data



RECYCLING/WASTE—REDUCE, RECYCLE, COMPOST!

Even though recycling and composting have become relatively mainstream all over the world I was surprised by the lack of single-stream recycling (where cardboard, glass, plastic, etc. all go into the same bin) in Seville. Not all cities are alike, but often I found recycling and composting pretty easily just by asking for it.

Notice how much less waste is created in supermarkets. I was shocked by how small trash cans (both in my host mom's house and on the streets) were in Spain, largely due to the smaller amount of waste created in comparison to the US. Just something interesting to pay attention to! Stores often charge for the use of bags too, so try to remember to bring your own when going shopping.

No more take-out! In a city and country without takeout, the amount of waste created is significantly less - so sit down, relax, and enjoy, all while saving the all that unnecessary plastic!

ENERGY USAGE—CONSERVE ENERGY!

Energy usage varies across the world; the US is consistently very high on the list of energy consumption per capita. While

China now uses more energy overall than the US, our per capita usage is higher. The average American consumes 222% more energy than a cost-conscious Spaniard who pays a higher premium for electricity. I picked up a ton of great energy saving habits abroad and, if you pay attention, you will too!

Because energy comes at a premium in most other parts of the world, take their cue, and remember to only use lights when necessary, take short showers, and keep curtains open to let the sun in during the day, and closed to keep the warmth in during the night (or vice versa if you're abroad in warmer climates or during warmer months)!

ATTITUDES TOWARDS CLIMATE CHANGE—ASK THE LOCALS!

I did a project on climate change and renewable energy in Spain for one of my classes, so I had the opportunity to ask local students, professors, and industry leaders about sustainability in Spain. Every country has distinct plans and goals related to sustainability, and the best way to learn about them is asking around - plus, it's a great way to interact with the locals!

IMMEDIATE EFFECTS OF CLIMATE CHANGE—INVESTIGATE THE IMPACT!

Climate change is already having an impact though some locations feel it more acutely than others. For example, Southern Spain is experiencing severe heat waves and growing desertification. According to a special report published by the European Court of Auditors in December 2018, "three-quarters of Spain faces desertification, making it one of the most seriously affected countries in Europe."³ I strongly recommend learning more about the impact rising temperatures and changing weather patterns are having in the country you are in.

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³ <https://www.politico.eu/article/farmer-sand-spain-fight-against-desertification-soil-degradation/>



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