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| Behind the scenes - one

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Encouraging you to cater for conscious customers' needs by managing your resources consciously lets us at the conscious tourism academic reflect on how we cater for you and our own conscious needs. Therefore it is very crucial for us to adapt our researched suggestions for this blog-website as well. The following post is created to describe which resources we use in providing this blog and how we can improve their use in bridging the gap between research and practice in our context.

Thoughts

In order to develop and create this blog we use technology, namely a 10 year old laptop and the internet. The laptop is used for other purposes as well and is being charged with electricity that is provided by a water driven power plant in Germany (a hydro power plant according to the electricity provider).
The internet is used to host this blog website and is used to conduct research on the discussed topics. The working space is set in a flat therefore no extra working space is being rented for the purpose of this blog. The laptop is reused and repaired as long s possible.
Which resources are we actually using by hosting this blog?

Research Summary

Gombiner (2011) highlights that the use of the internet, the production of goods and services as well as individual behaviour generate a carbon footprint meaning release greenhouse gases into the atmosphere. The greenhouse gases (GHGs) can be broken into carbon dioxide (CO2), methane (CH4), Nitrous Oxide (N2O), Sulphur Hexafluoride (SF6) and a class of compounds known as fluorocarbons. In order to make the emissions of gases relatable GHG emissions are converted to a carbon dioxide equivalent - known as carbon footprint (Jacobsen et al. 2014; Wiedmann & Minx 2008). Different carbon footprint calculation methods exists (Chenoweth et al. 2014; Fang et al. 2014; Jacobsen et al. 2014; Perry 2014; Wiedmann & Minx 2008). Where are GHGs produced in the context of the internet?

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According to Gombinier (2011) the internet can be divided into two origins for GHGs.

- „Technology companies must manufacture (by extracting raw materials and assembling in factories) and ship (using airplanes, trucks, etc...) the internet's hardware: servers, personal computers, iPhones, etc.
- „Then, those devices must be powered and cooled, drawing electricity from their local grids, energy that is generated in different ways with varying GHG emissions."

The reason why a conscious GHG use is so urgent is rooted in the following. Carbon dioxide, like the other mentioned greenhouse gases, has climate-effecting effects when solar radiation is converted into heat at the earth's surface. The molecules of the greenhouse gases in the air of the Earth's atmosphere absorb this heat, thus preventing the thermal energy from escaping into space. As a result, the Earth's atmosphere heats up, which is the cause for climate change.

In contrary to using the internet traditional offline forms of providing information come to mind. However, it can be concluded with the following table that using the internet ranks better than printing brochures in terms of resource use.

Mode		**CO_2 (g)**	**Energy (kWh)**	**Water (L)**
Internet	1 Google search	0.2	0.0003	n.a.
Brochure [a]: paper in European A4 Size	Non recycled paper á 80 g/m²	5.2	0.0536	0.2604
	Recycled paper á 80 g/m²	4.4	21	0.1022
Source:		Clean Energy Project (2011), Greenpeace Aachen (2012) [b]	Clean Energy Project (2011), Greenpeace Aachen (2012)	Greenpeace Aachen (2012)

[a] Calculation without the resources used for printing as well as for distribution.

[b] Greenpeace Aachen (2012) uses globally approved data.

Source: own creation (2015)

What now?

According to bridging research and practice we first set out to gain an understanding of how much Co2 equivalent the blog uses. We used a website carbon calculator to inform ourselves about the blog's energy use. After a very shocking result (!) we proceeded in researching ways on how to improve the blog's energy use.

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We are currently planning to move the blog to a „green host“ and are looking into different options. Meanwhile we set up a compensation arrangement with atmosfair counteracting the impact the blog currently has on the environment.

Are you interested in learning how you can improve your company’s resources use? Have a look at our now what? section for inspiration.

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