



# **Comparison Research Project**

## 1. Income of Search Engines

Search Engines earn income from their Ads. They provide space for companies to put ads on their search pages. Every time people click on the ads, the engines earn cents. But cents surely add up. People in the world search over 1.1 trillion times every year. If everyone clicks on a search ad and every click earns a dollar, the amount will be about half the amount of US's tax income for a year.

#### 2. Environmental Mistreatment of Search Engines

Search Engines are run by massive server networks, and they need electricity, which power plants help make. However, 85% of electricity is made from nonrenewable energy, and in that situation, it makes CO<sup>2</sup>. On average, every time you search, about 6.8 grams of CO<sup>2</sup> is released into the air. And as I mentioned, people searches an amazing 1.1 trillion times every year. The search engines produce about 7.7 million tons CO<sup>2</sup> every year, which is equivalent to driving 1.5 million cars! Some ecologists think that search engines are mistreating our environment and are producing too much CO<sup>2</sup>.

## 3. Comparison of Ecosia and Google

Ecosia is an eco-friendly search engine that uses Bing's database and Yahoo's ads. It was created in 2008. Ecosia works like any other search engine, but it has an additional service – EcoLink. They introduced it in 2010. If you use Ecosia to find a commercial website and go shopping there, the website pays 1 to 5 percent of their income to Bing and Yahoo, and most of it goes to Ecosia.

Unlike others, Ecosia doesn't put their income (Ads and EcoLink) into their investor's pockets, but instead, they donate 80% (the rest 20% is administration costs) of it to the Tumucumaque Conservation Project held by the WWF in the Amazon.

Google works the same as any other search engine, but it is the most popular in the world, with over 1 trillion users each year. However, it doesn't do anything in the protection of the environment.

### 4. Does Ecosia Help? If it does, any Proof?

Ecosia can surely help. The green web search donated about 700,000 Euros (27 million NTD) to the Tumucumaque Conservation Project already. We did some research on it. Ecosia donates about one Euro in every 620 searches on average. The green web search isn't too famous yet, so only about 600,000 people search on Ecosia every day, meaning Ecosia can generate 1,000 Euro for the WWF every day! Every Euro generated means that about a half acre of the Amazon is now protected by the WWF. Every tree absorbs about 5.9 kg of CO<sup>2</sup> each year. That means, every time you search with Ecosia, the search engine absorbs 155 grams of CO<sup>2</sup> on average!

Well, does Ecosia actually donate the money to the WWF? There are proofs. Ecosia's official website has files of the donation receipts and its business reports open to the public. So, you can believe them. It is perfectly safe.

### 5. Ecosia's Impact in the Environment

Ecosia...

- Generated about 700,000 Euros for the WWF
- Protected 500 km<sup>2</sup> of the rainforest in the Tumucumaque region of Brazil
- Absorbed about 70,000 tons of CO<sup>2</sup> (equivalent to taking 14000 cars of the road)
- Is Used about 150,000,000 times in 2011
- Has a Market Share of 1 / 7280

# 6. Google's Impact in the Environment

Google...

- Generated no money for the environment
- Released about 7 million tons of CO<sup>2</sup> in 2011 (equivalent to driving 1.4 million cars)
- Is Used about 1,023,000,000,000 times in 2011
- Has a Market Share of 91%

#### 7. Ratings of Ecosia and Google in Environmental Responsibility



