

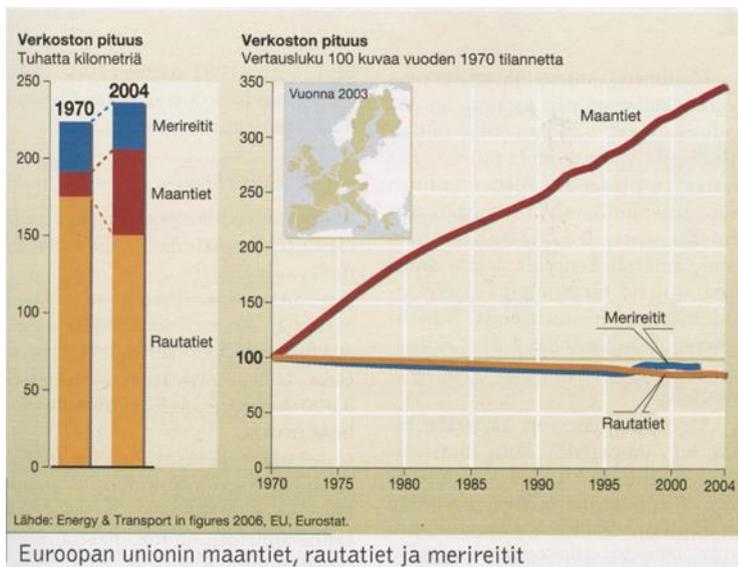
## Homework 1&2 Ville Myllynpää 0422461

### Growth in the transportation sectors over the last decades.

First of all, this task proved to be more challenging than I originally thought. The reason for that was, that up-to-date data, which would cover the whole world, was nowhere to be found. Instead I found data covering each country individually for different transportation sectors.

I also find some global graphs, but they are almost decade old.

Graph about development in the length of road, railroad and sea networks, over time period of 1970-2004 in Europe. (Red line = roads, blue line = sea routes and yellow line = railroads)



(Ympäristö Atlas. 2008. Like Kustannus. p21)

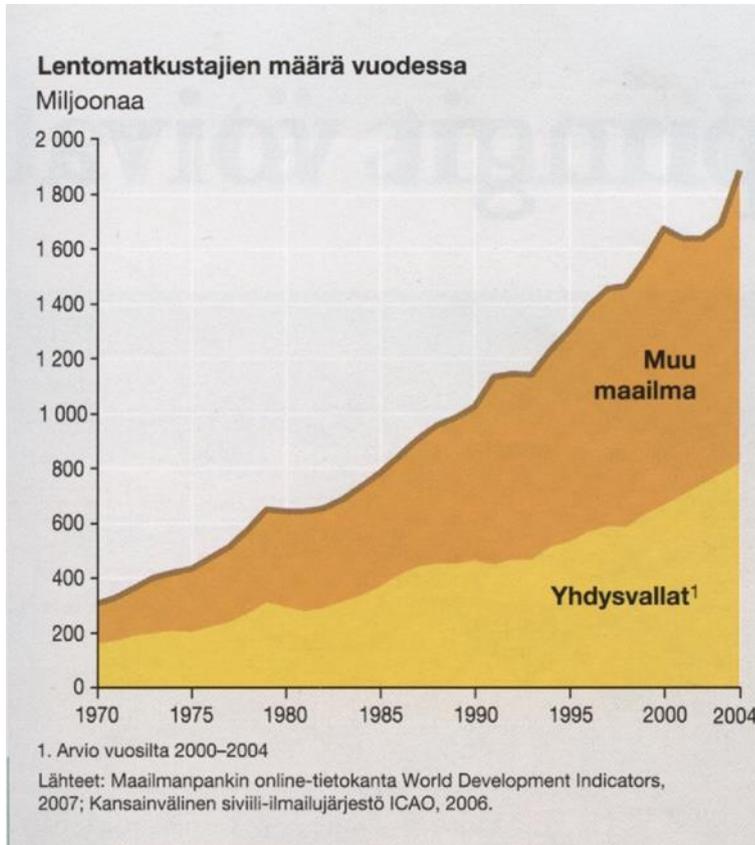
### Car

Link to up-to-date country data about amount of cars per 1000 people, data from 2000 to 2013:

<http://data.worldbank.org/indicator/IS.VEH.NVEH.P3/countries?page=2>

## Air traffic

Graph about growth in the number of airplane passengers, over time period of 1970-2004. (Yellow = USA, orange = rest of the world)



(Ympäristö Atlas. 2008. Like Kustannus. p23)

Link to up-to-date country data about amount of airplane take-offs, data from 1980 to 2013:

<http://data.worldbank.org/indicator/IS.AIR.DPRT/countries?page=6>

## Shipping

Link to up-to-date country data about container port traffic, data from 2000 to 2013:

<http://data.worldbank.org/indicator/IS.SHP.GOOD.TU/countries?page=2>

## Railroad

Link to up-to-date country data about length of railroad tracks, data from 1980 to 2013:

<http://data.worldbank.org/indicator/IS.RRS.TOTL.KM/countries?page=6>

## **Consumption monitoring, week 14**

### **Travel**

Using the buss five times for the last week (total 30 km).

Could be substituted by biking or walking.

### **Food**

Trying to buy organic, whenever available and have extra money in use.

School lunch is one thing, since there isn't data available on what type of ingredients they use and you don't have a choice on to what they use.

In the future, when my income level hopefully increases, there are better changes to buy organic food.

### **Electricity**

Refrigerator is always on. For those few hours a day when I am home, there is on few lights (4\*40W), laptop (73W), TV (69W), charges and some kitchen equipment's every now and then.

The problem is that there is no data available about the electricity consumption (in LOAS), so it is hard to say how much these actually take energy in one week. I would estimate it to be around 5 kWh.

There is an option for chancing the light pulps for LED and not having unnecessary stuff on. Also electricity bought, could be coming only from renewable sources, but is up to LOAS to make that decision.