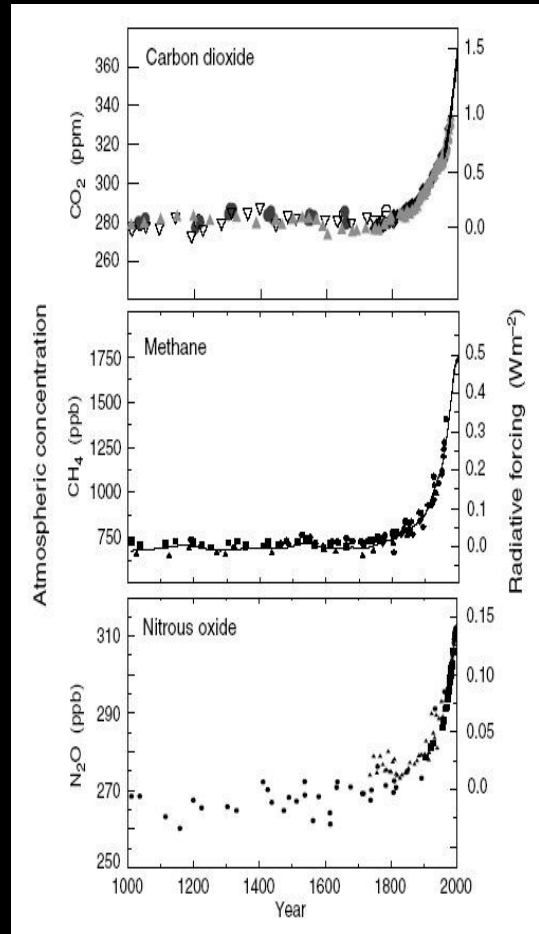


Land Management

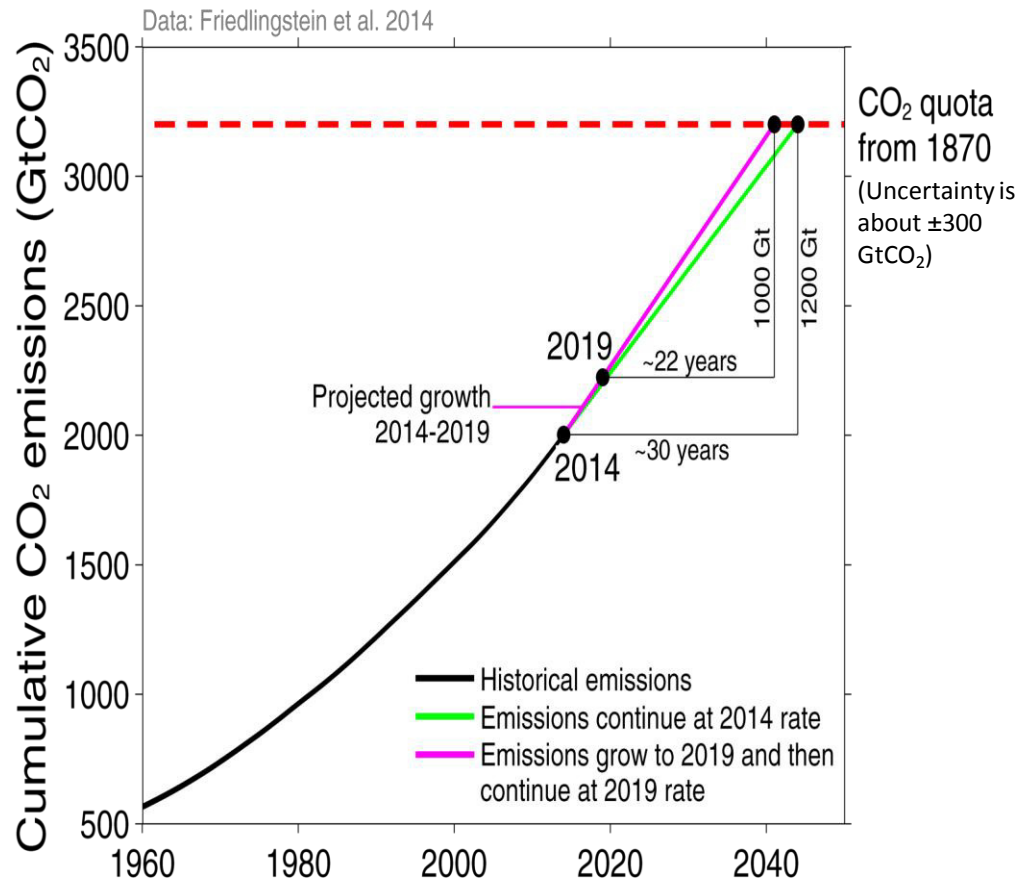
Concrete Actions for Climate protection

Prof. Riccardo Valentini- Università della Tuscia -CMCC, IPCC



Remaining emissions quota

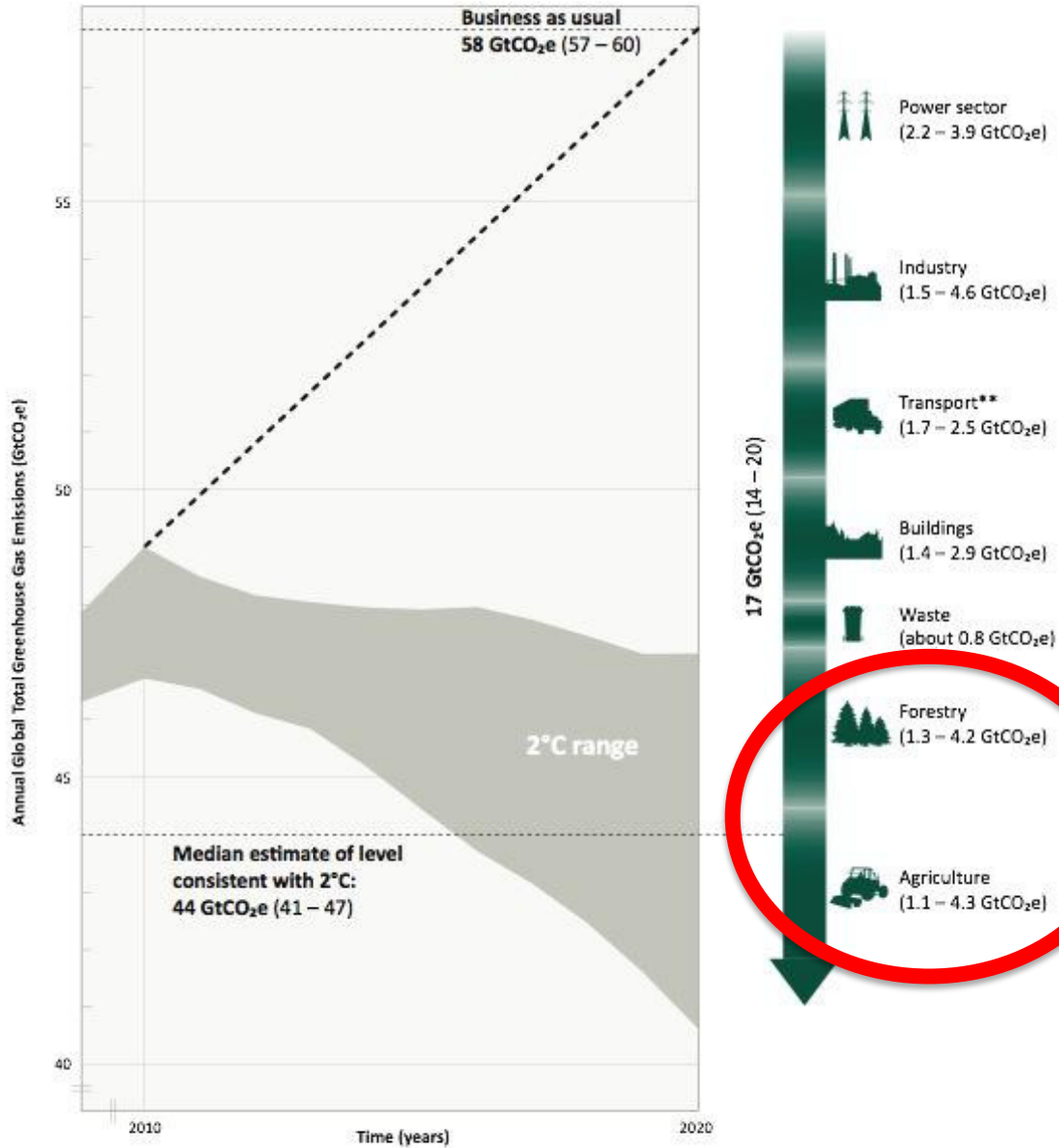
- Cumulative CO₂ emissions should remain below about 3200 Gt for a 66% chance of staying below 2°C
At present emissions rates the remaining budget would be used up in about 30 years



If emissions continue to grow as projected to 2019 and then continue at the 2019 rate, the remaining budget would be used up about 22 years from 2019

Source: [Friedlingstein et al 2014](#)

How to bridge the gap: results from sectoral policy analysis*



*based on results from Bridging the Emissions Gap Report 2011

**including shipping and aviation

Fate of Anthropogenic CO₂ Emissions (2004-2013 average)

32.4 ± 1.6 GtCO₂/yr 91%



3.3 ± 1.8 GtCO₂/yr 9%



15.8 ± 0.4 GtCO₂/yr 44%



10.6 ± 2.9 GtCO₂/yr 29%



Calculated as the residual of all other flux components

9.4 ± 1.8 GtCO₂/yr 26%



GREEN INFRASTRUCTURES

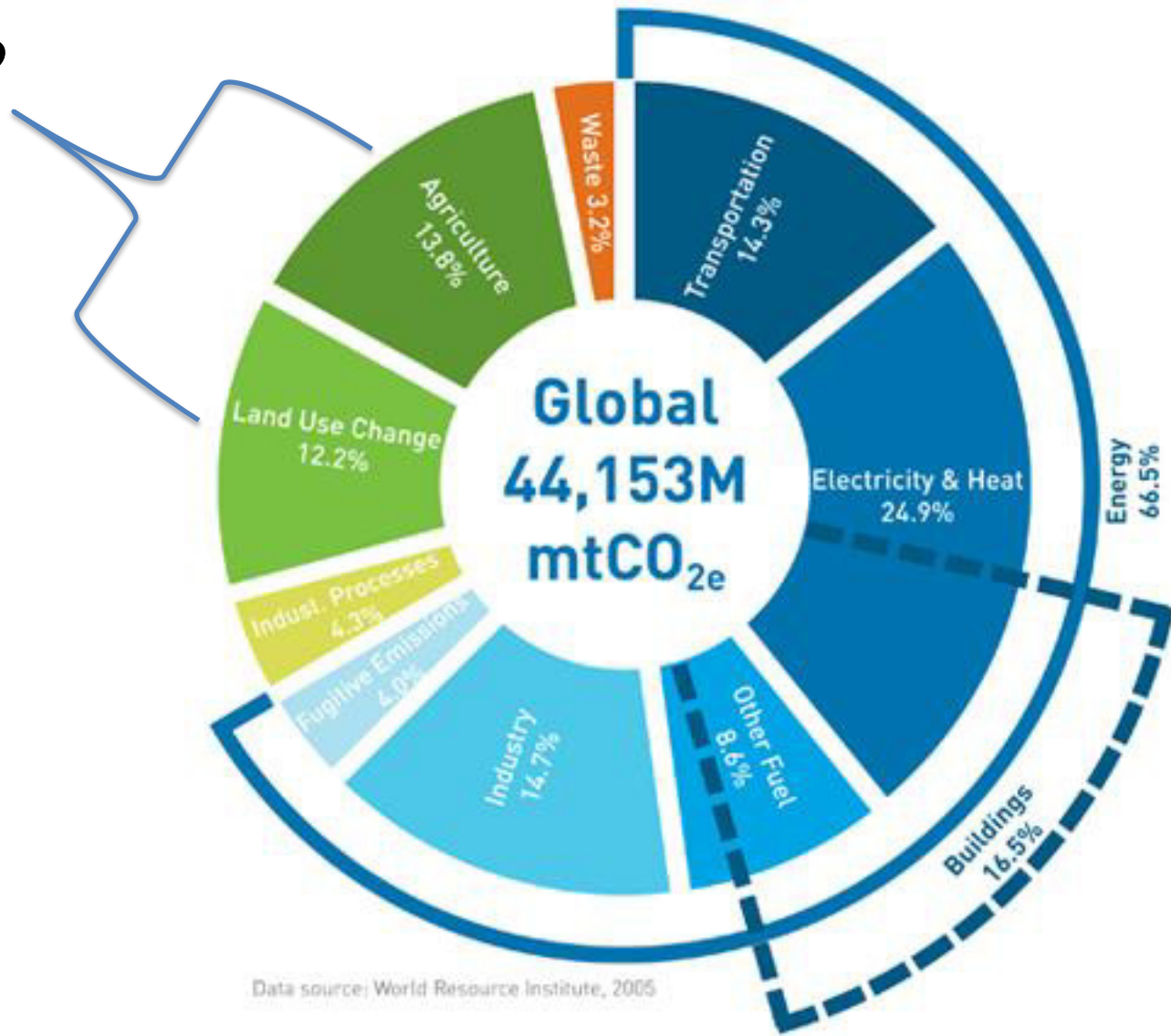


Action 1 – Improving green infrastructures

Increasing green infrastructures in Europe by 10% of the current area will reduce greenhouse gases emissions by 3%

Global Greenhouse Gas Emissions per Sector

26%



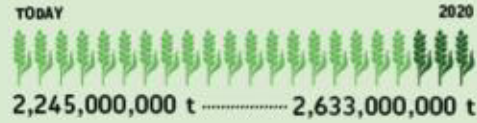
Data source: World Resource Institute, 2005

FEED PEOPLE, ANIMALS, OR CARS?

One-third of all food production worldwide is destined for feeding livestock. In addition, a growing share of agricultural land is used for the production of biofuel. As a result, we are choosing to feed automobiles instead of people.

* allocation of the use of grains as a percentage between animal food, human food, and the production of biofuel

GRAIN PRODUCTION IN THE WORLD AND ITS USE*

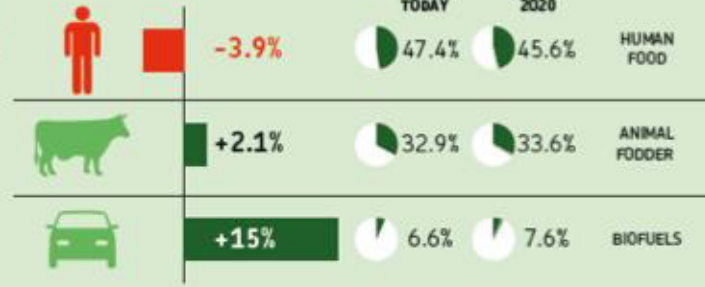


+17.3%

POPULATION



+10%



FILIPE FORTES PRESENTS:



The China Diet



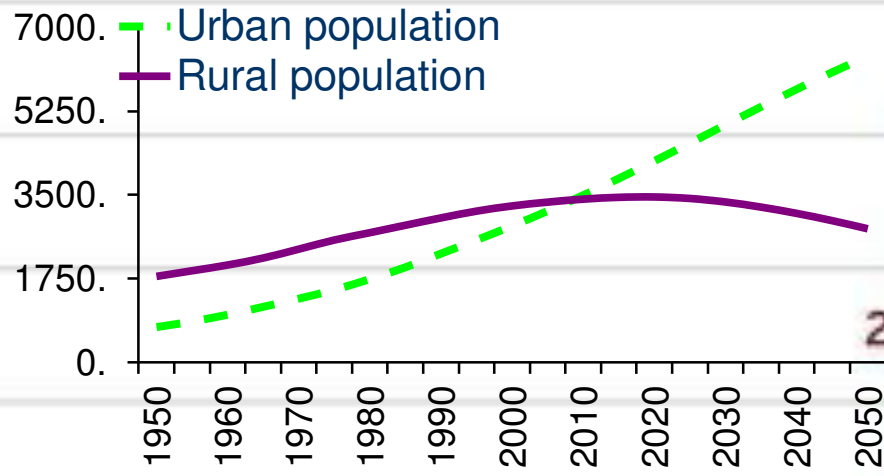
World population growth

Fertility rates are declining, the United Nations says, but not fast enough to stop population growth. The U.N.'s medium-level projection is for the world's population to reach 9.2 billion by 2050 but still more than 3 billion higher since the turn of the century. Population activists say that's too much for the world to handle.

Population **Year**

9.2 billion* — 2050
 8 billion* — 2025
 7.3 billion* — 2015
 6.7 billion — 2007
 6 billion — 2000
 5 billion — 1987
 4 billion — 1975
 3 billion — 1960
 2.5 billion — 1950
 2 billion — 1930
 1 billion — 1800

6 billion



5 million 10,000 B.C.

250 million 1 A.D.

10000 8000 6000 4000 2000 0 2000

DIE OF HUNGER OR OBESITY?

Today, worldwide, for every malnourished person, there are two people who are obese or overweight.

1

TODAY
IN THE
WORLD

UNDERNOURISHED PEOPLE
868
million

OBESSE OR OVERWEIGHT PEOPLE
1.5
billion



FOR EVERY UNDERNOURISHED
PERSON, THERE ARE TWO WHO
ARE OBESSE OR OVERWEIGHT



DEATHS
EVERY YEAR
WORLDWIDE FROM:



LACK
OF FOOD
36
million



TOO MUCH
FOOD
29
million



FEED WASTE OR FEED THE HUNGRY?

Every year worldwide, 1.3 billion tons of perfectly edible food are wasted, while 868 million people suffer from hunger.

3

1/3 OF GLOBAL FOOD PRODUCTION

ENDS UP IN THE GARBAGE EACH YEAR



=



1.3 OF FOOD ARE WASTED billion tons

4 TIMES WHAT IT WOULD TAKE TO FEED THE 868 MILLION PEOPLE WHO ARE HUNGRY



THE PLANET'S BALANCE IS NEGATIVE

Today, what is consumed is greater than what we are able to regenerate. For our current lifestyle, we will need 1.5 planets, and in 40 years we will need 3

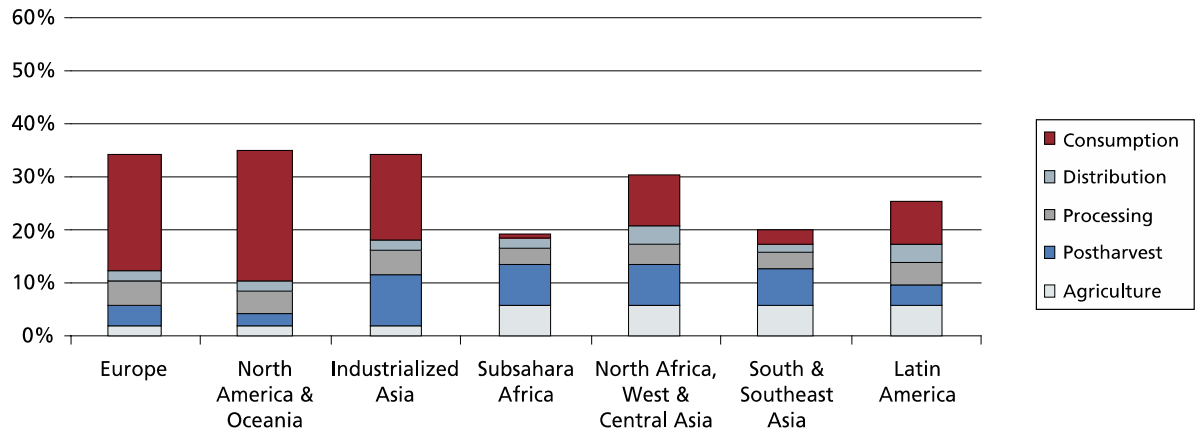
TODAY 1.5 planets



2050 3 planets



Food losses - Cereals



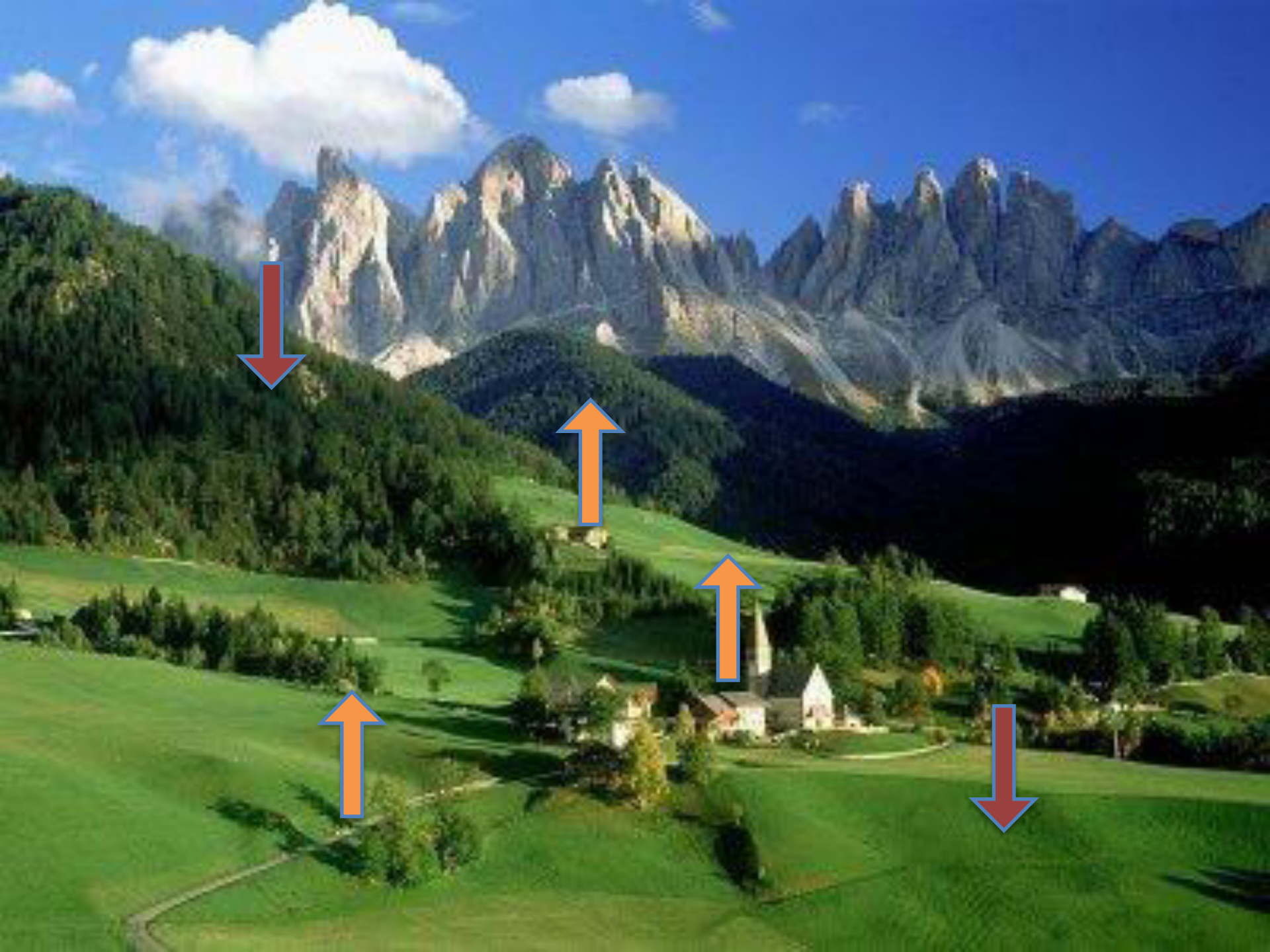
FOOD WASTE

Action 2 – Reducing Food Waste

Reducing food waste by 50% in Europe will contribute to reduce 14% of total EU greenhouse gases emissions

Change our approach to land *the landscape approach*





Action 3 – Introduce the Land Base Accounting

The land base accounting allows to offset land emissions and carbon sequestration at local (district level) enhancing economic opportunities and landscape protection

Grazie !!

