

# CLIMATE CHANGE & the EU

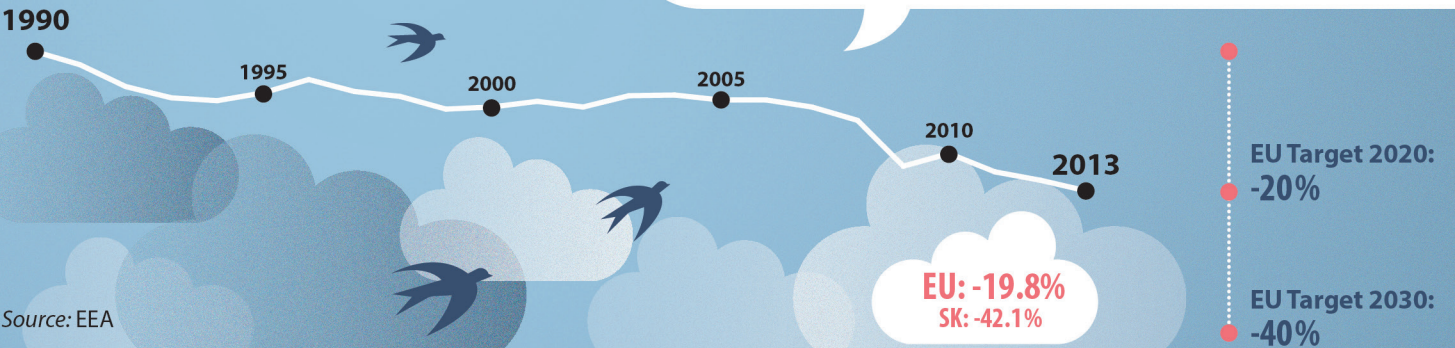
Greenhouse gases (GHG) emitted by human activities are warming the Earth and causing changes in the global climate. These changes are having increasingly severe human, economic and environmental impacts and will continue to do so over the coming decades.

Many activities contribute to these GHG emissions: burning fossil fuels, cutting down trees, farming of livestock, placing household waste in landfill to rot.

The EU has been taking action. The Europe 2020 strategy supports the shift towards a low-carbon, resource-efficient economy, with targets for reducing GHG emissions, increasing the use of energy from renewable sources and improving energy efficiency.

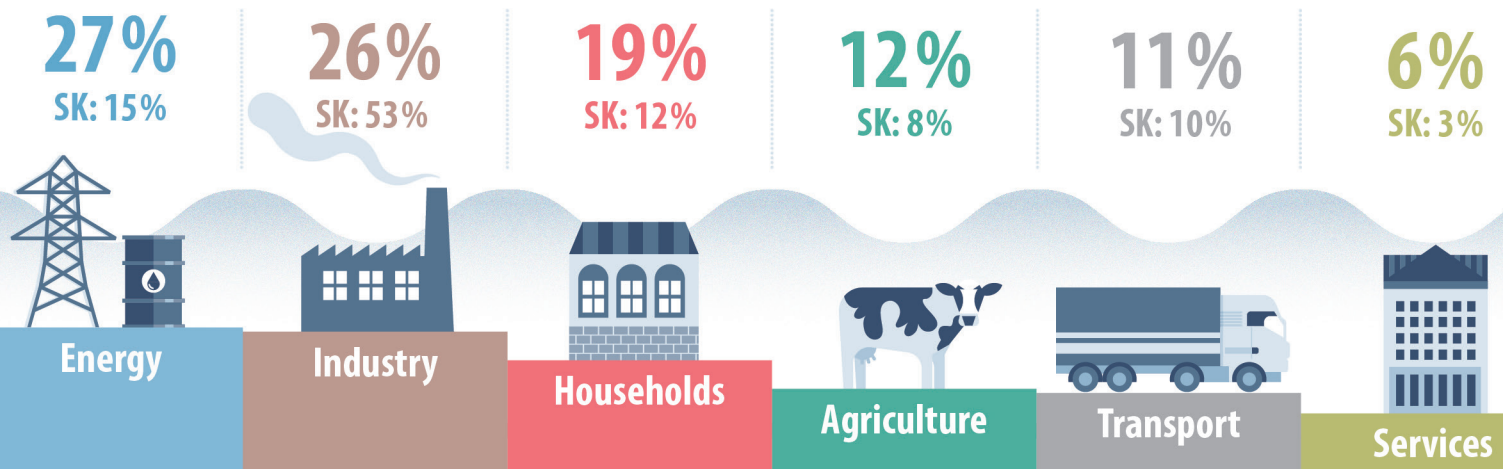
At COP21, the 21<sup>st</sup> Conference of the Parties to the United Nations Framework Convention on Climate Change, the EU will be part of a worldwide effort to achieve a new international agreement on climate change, applicable to all, to keep global warming below 2°C.

## Greenhouse gas emissions



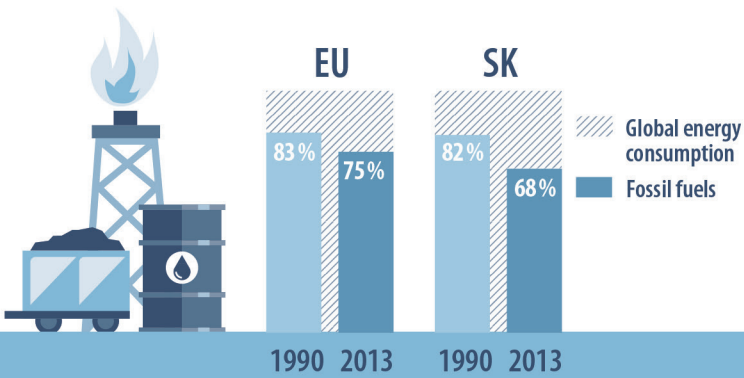
## Who is contributing to greenhouse gas emissions?

2012 data



## Fossil fuels energy consumption

While in 2013 we consumed around the same amount of energy as in 1990, the share of fossil fuels has fallen and the use of renewables has increased.

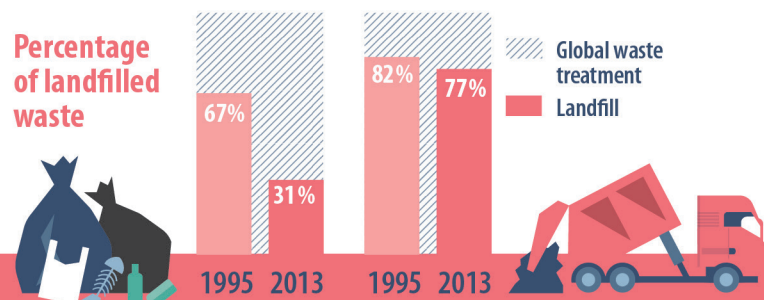


## Waste

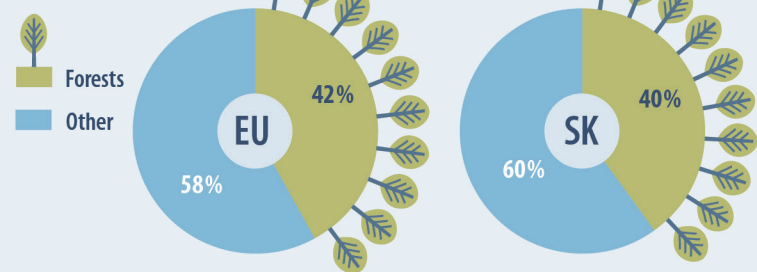
Municipal waste per capita in 2013 (kg/capita)



There has been a significant decrease in the proportion of waste sent to landfill in the EU.

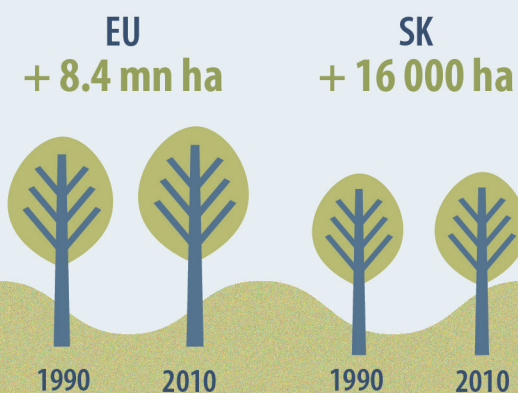


## Forests



Today's share (2010) of forests in total area

## Change of forest area from 1990 to 2010



With the increase of forests and other land use changes in the EU more CO<sub>2</sub> has been removed from the atmosphere, equivalent to 7% of total emissions.

## Definitions

**Greenhouse gases** are a group of gases that contribute to global warming and climate change, among which are carbon dioxide (CO<sub>2</sub>), nitrous oxide (N<sub>2</sub>O) and methane (CH<sub>4</sub>). Converting the amount of each gas to its CO<sub>2</sub> equivalent makes it possible to compare them and to determine their individual and total contributions to global warming.

**Emitters of greenhouse gases** are classified here according to the NACE Rev. 2 classification of economic activities. In particular, 'transport' is the transport industry, including aviation. Transport emissions by other economic activities such as energy, agriculture, services, etc. are classified under those activities. Energy consists of electricity, gas, steam and air conditioning supply. Households emit greenhouse gases through heating, private transport and other activities.

**Energy consumption** refers to gross inland energy consumption, which is the total energy demand of a country or region. It covers consumption by the energy sector itself, distribution and transformation losses and final energy consumption by end users.

**Waste** refers to municipal waste - the waste collected by or on behalf of municipal authorities and disposed of through waste management systems. It consists to a large extent of waste generated by households, but may also include similar wastes generated by small businesses and public institutions and collected by the municipality.

**Landfill** is the deposit of waste into or onto land, including specially engineered landfill and temporary storage of over one year.

**Removal of CO<sub>2</sub>** from the atmosphere: Forests are natural carbon stores, and as they increase in density or area more carbon dioxide can be stored.

**Forests** refer to the total area of forests and other wooded land. The share is calculated out of the total land area excluding inland water such as lakes and rivers.



### Sources:

All data are source Eurostat, except data on greenhouse gas emissions' development (source EEA – European Environment Agency).

### For more information:

- Eurostat website section dedicated to [environmental statistics and accounts](#).
- Eurostat website section dedicated to [energy statistics](#).
- Eurostat website section dedicated to [Europe 2020 indicators](#).
- Eurostat publication "Smarter, greener, more inclusive? - Indicators to support the Europe 2020 strategy" (2015 edition).
- Eurostat Statistic Explained article "Europe 2020 indicators - climate change and energy"
- Eurostat Statistics Explained article "Sustainable development - climate change and energy"
- Eurostat news release 195/2015 "A range of indicators monitoring progress made in the EU to tackle climate change".
- Eurostat publication "Energy, transport and environment indicators" (2015 edition).

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