

The Hungarian GHG emission/removal facts in 2011

- the total GHG emissions were 66.1 million tonnes CO₂e (excluding the LULUCF=land use, land use change and forestry sector) which is the lowest value in the whole time series from 1985 till 2011. Taking into account the removals in the LULUCF sector, the net emissions were 62.4 million tonnes CO₂ e. With the 6-7 tonnes, the Hungarian per capita emissions are below the European average,
- emissions are 43.2% lower than in the base year (average of 1985-87),
- from the total GHG emission CO₂ accounts for 75.2% with the main source of burning the fossil fuels for energy purposes including transport. CO₂ emissions have decreased by 41.8% since the middle of the 80's.
- CH₄ represents 12.8% in the GHG inventory. Methane is generated mainly at waste disposal sites and in animal farms, but the fugitive emissions of natural gas are also important sources. CH₄ emissions are by 37.2% lower than in the base year.
- N₂O contributes 10.2% to the total GHG emissions. Its main sources are agricultural soils, and manure management. N₂O emissions are 60.4% lower compared to base year.
- the total emissions of fluorinated gases amount to 1.8% but their steadily growing tendency seems to level off since 2008.
- the energy sector is the biggest emitting sector contributing with 71.6% to the total GHG emission. Agriculture was the second largest sector with 13.2% while emissions from industrial processes (with solvent and other product use) accounted for 9.8% and the waste sector contributed 5.3%.
- the energy sector was responsible for 71.6% of total GHG emissions. Carbon dioxide from fossil fuels was the largest item among greenhouse gas emissions contributing 94.3% to the sector emission. 32% of the domestic energy consumption was used by energy industries.
- agriculture was the second largest source of GHG emissions. Emissions from agriculture include CH₄ and N₂O gases, 87.4 % of total N₂O emissions were generated in agriculture in 2011. Emissions from agriculture have decreased by 54% over the period of 1985-2011.
- the industrial processes sector was the third largest sector, contributing 9.4% to total GHG emissions. The most important greenhouse gas was CO₂, contributing 80.1% to the total sector GHG emissions, followed by F-gases with 18.9%. Within this sector, 36.2% of the emissions came from iron and steel industry, Process related industrial emissions decreased by 57.7% between base year and 2011, and by 30.7% between 2005 and 2011.
- the waste sector represented 5.3% of total national GHG emissions. The largest category was solid waste disposal on land, representing 79.3%. The emissions from the waste sector are by 14.5% higher now than in the base year.
- the LULUCF sector accounted for 3.8 million tonnes carbon-dioxide removals. The net removals of forests amounted to 2.9 million tonnes CO₂
- the emissions and removals by gas from LULUCF (Gg) is CO₂ 46%, CH₄ 21%, N₂O 393% NO_x-23% CO -23%,
- the trends in CO₂e emissions/removals from LULUCF by land-uses(Gg) CO₂e by forest 46%, forest remaining forest 1% cropland,-705%, grassland 1506%, wetland -12%, settlements156%,
- the amount of carbon lost by removing all woody biomass due to conversion for a unit area amounts to 4.7 t C/ha in case of orchards and 8.86 t C/ha in case of vineyards,
- it is considered that the average carbon stock for a 15 year-old orchard and vineyard is 2.35 and 4.43 t C/ha,

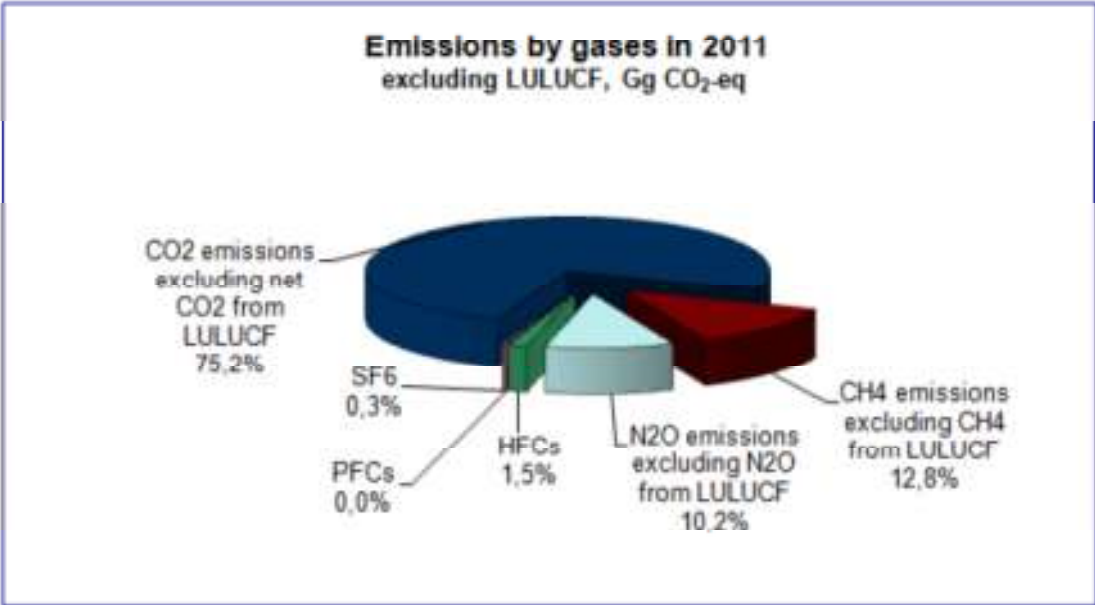


Figure 2.7 Shares of emissions of greenhouse gases in 2011

The Hungarian energy mixt

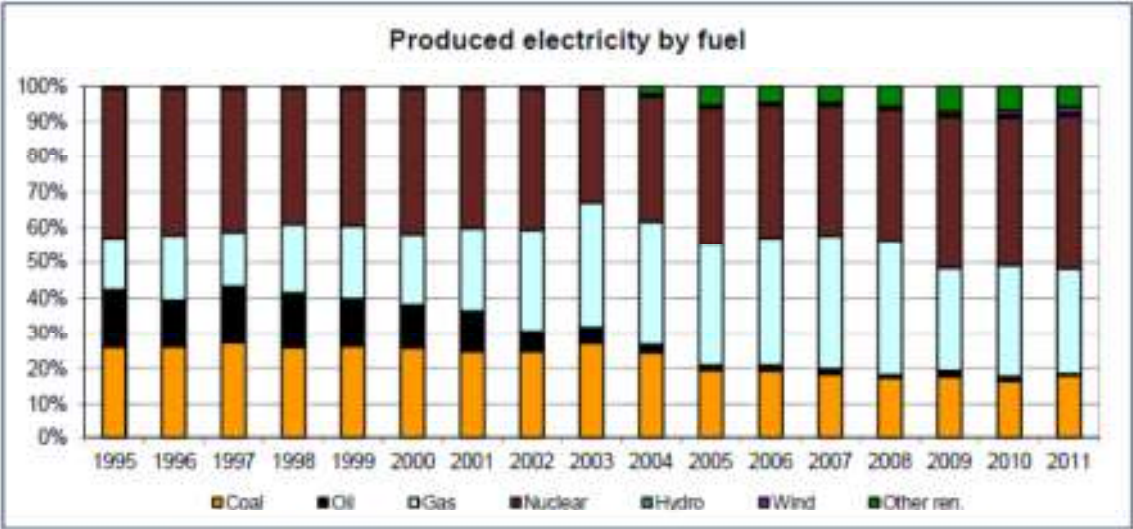


Figure 3.10 Share of produced electricity by fuel (1995-2011)

Source: OMSZ 2013. report