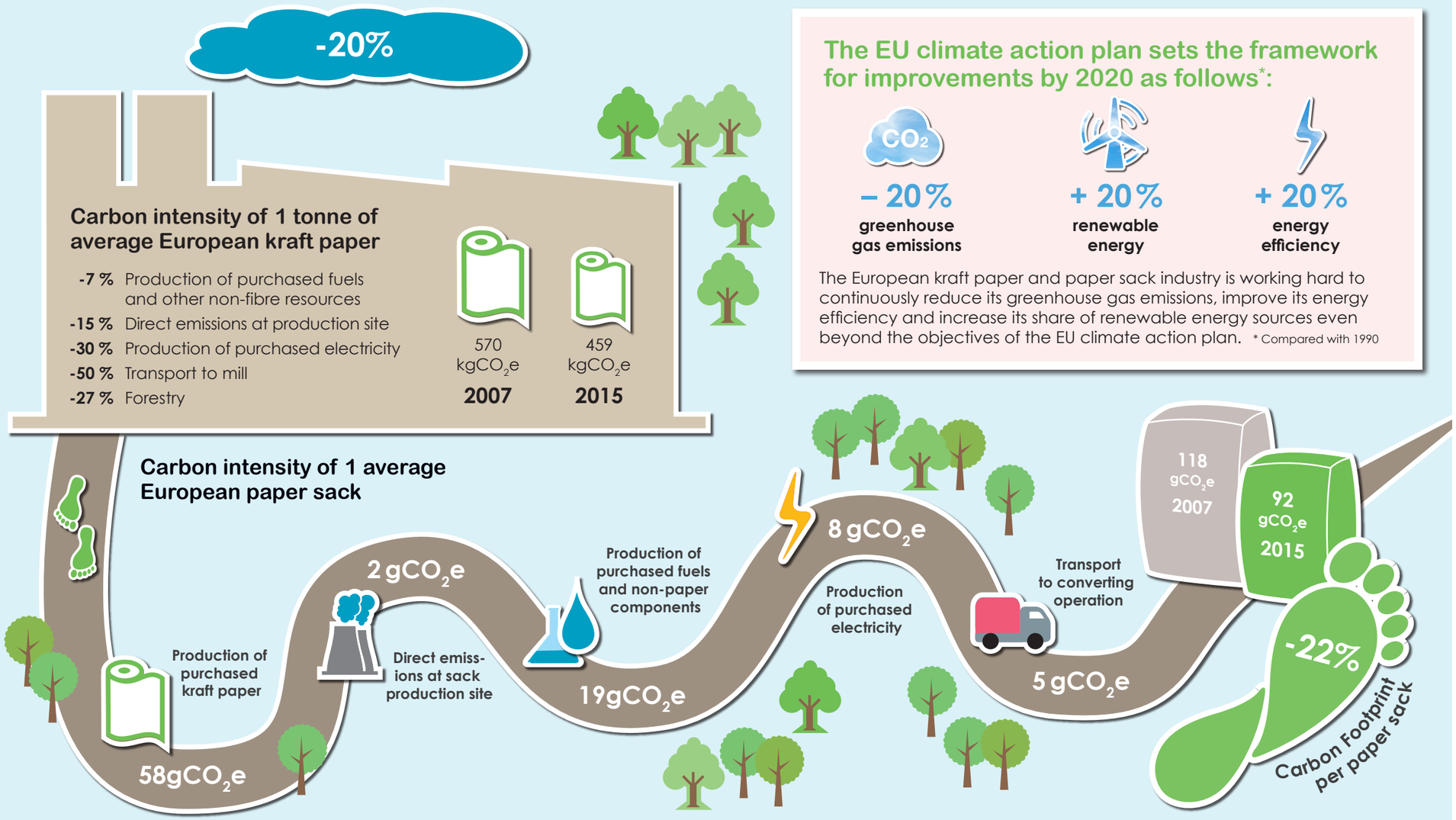
# $CO_2$ FOOTPRINT OF THE EUROPEAN PAPER SACK IN 2015




## The EU climate action plan sets the framework for improvements by 2020 as follows*:

**– 20 %** greenhouse gas emissions

**+ 20 %** renewable energy

**+ 20 %** energy efficiency

The European kraft paper and paper sack industry is working hard to continuously reduce its greenhouse gas emissions, improve its energy efficiency and increase its share of renewable energy sources even beyond the objectives of the EU climate action plan. * Compared with 1990

## Management Summary

Between 2007 and 2015, the European kraft paper and paper sack industry made continued and significant improvements to its carbon footprint:

- ✓ The carbon intensity of 1 tonne of average European kraft paper – which accounts for 60% of the carbon footprint of a paper sack – was optimised by 20%.
- ✓ In the further course from cradle to gate, the overall carbon intensity of one individual paper sack has improved by 22%, partly due to lightweighting efforts.

Extending the analysis to include additional aspects would give an even more complete picture of the carbon footprint of European paper sacks.

- ✓ Taking into account end-of-life emissions and any benefits arising from emissions avoided due to recovery and waste management activities reduces the carbon footprint per average European paper sack to 85 $gCO_2e$ (instead of 92 $gCO_2e$).
- ✓ It is a well-known fact that forests sequester and store carbon. The sustainable management and growth of forest areas in Europe is a central element of the value chain for paper sacks. If the increasing biomass in Europe's forests were considered in the calculation, the carbon footprint would actually be negative, at –214 $gCO_2e$ per sack.

## Impact of improvement

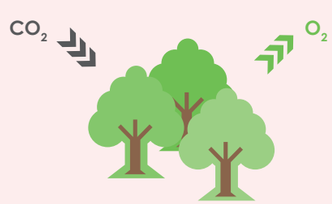
Comparing the results for 2007 to those for 2015, the total $CO_2e$ improvement for one year* equals

- » about 27,200 circumnavigations around the globe**
- » the emissions due to consumption (food, living, travel etc.) produced by a small town of about 14,800 people per year***

* About 5 billion paper sacks are produced per year in Europe by EUROSAC's members. Due to the improvements in the carbon footprint from 2007 to 2015, emissions fell by 130,000 $tCO_2e$. ** Considering that the average $CO_2$ emissions of a newly registered passenger car are 119,5 g/km, this equals almost 1,09 billion passenger car kilometres. *** On average, 8,8 tCO2e are produced per capita in Europe in 2015.

## Good to know

Sustainably managed forests act as a carbon sink. 1$m^3$ of wood captures 1 t of carbon dioxide while emitting 0.7 t of oxygen.




## What is $CO_2e$?

$CO_2$ equivalent ($CO_2e$) is a measure for describing how much global warming a given type and amount of greenhouse gas may cause, using the functionally equivalent amount or concentration of carbon dioxide ($CO_2$) as a benchmark.

The results presented are based on a study conducted by the Swedish research institute Innventia on behalf of:

**www.eurosac.org**
**www.cepi-eurokraft.org**

eurosac

CEPI EUROKRAFT
European Producers of Sack Kraft Paper and Kraft Paper

**Performance powered by nature**