

# The Environmental Benefits of PET Recycling

Comparing the Life Cycle Impacts of Virgin and Recycled PET (Polyethylene Terephthalate)

Life cycle analyses have examined energy requirements and environmental impacts of producing both recycled PET (RPET) and new, virgin material (VPET). Results show that the production of RPET pellets has significantly better results for the environment than that of VPET in almost every impact category measured.<sup>1</sup>

The life cycle studies help to quantify the environmental benefit that comes from recycling PET.

## Each unit of recycled PET that replaces virgin results in:

**40%**

Less process and transport (expended) energy

**76%**

Lower total energy demand

**59%**

Reduction in greenhouse gas emissions

## Each year, equivalent environmental savings from RPET usage in products in the US and Canada add up to:

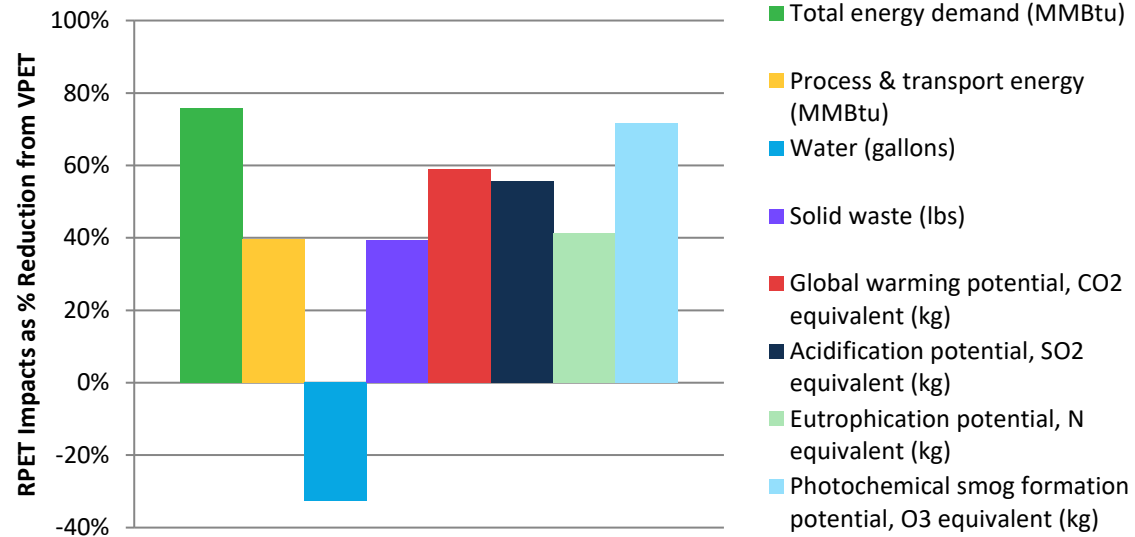
Electricity to power more than **760,000** US homes

Energy

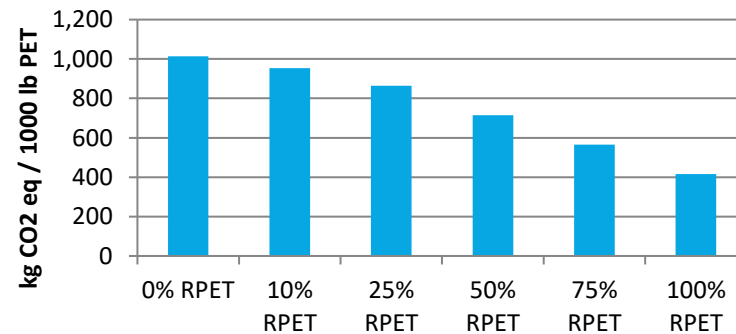
Removing more than **200,000** cars from the road

GHG Emissions

## Environmental Savings - Recycled PET vs. Virgin PET



## Greenhouse Gas Emissions Decrease with RPET Content



<sup>1</sup> All data sources may be found at [www.napcor.com/sustainability/life-cycle-analysis](http://www.napcor.com/sustainability/life-cycle-analysis); Figures are determined using the cut-off method, which assigns all virgin material production burdens to the first use of the material, and all burdens for material recovery, transport, separation and sorting, and reprocessing are assigned to the recycled material.