## CLAIMS

**1.** A method **characterized** by comprising the following steps:

subjecting a recycled fossil-based feedstock to a heat treatment, prior to or as a part of evaporating the heat-treated feedstock to produce a distillate and a residue fraction,

hydrotreating the distillate to produce a hydrotreated distillate,

performing catalytic cracking of the hydrotreated distillate as a feed component in the presence of a solid acid catalyst,

wherein during the heat treatment step:

a) the heating temperature is at least 290°C;

b) the duration of the step is at least 1 minute; and

c) the temperature of the step is the highest temperature among all temperatures preceding the catalytic cracking step.

**2.** The method according to claim 1, further comprising a pre-treatment step of de-watering the recycled fossil-based feedstock.

**3.** The method according to claim 1 or claim 2, wherein the feed of the catalytic cracking step comprises a biomass-based feed component in addition to the hydrotreated distillate.

**4.** The method according to any one of claims 1 to 3, wherein the feed of the catalytic cracking step comprises a fossil feed component in addition to the hydrotreated distillate.

**5.** The method according to any one of claims 1 to 4, wherein the evaporation step is carried out by distillation, e.g. in a distillation column or in a fractionation tower.

**6.** The method according to any one of claims 1 to 5, wherein the evaporation step is carried out in a fast evaporation apparatus, such as a thin film evaporator, a flash evaporator, a short path evaporator, a plate molecular still, or a falling film evaporator.

**7.** The method according to any one of claims 1 to 6, wherein no hydrogen gas is fed in the cracking step.

**8.** The method according to any one of claims 1 to 7, wherein the heating temperature during the heat treatment step is at least 300°C, preferably at least 310°C, at least 320°C or at least 330°C.

**9.** The method according to any one of claims 1 to 8, wherein the heat treatment step is carried out for at least 2 minutes, preferably at least 5 minutes, at least 10 minutes, at least 20 minutes, at least 30 minutes, at least 40 minutes, at least 50 minutes, at least 60 minutes, at least 80 minutes or at least 100 minutes.

**10.** The method according to any one of claims 1 to 9, wherein the heat treatment step is carried out at a pressure of 1.0 bar or more, preferably 1.2 bar or more, 1.5 bar or more, 2.0 bar or more or 3.0 bar or more.