CLAIMS:

1. A process for converting waste plastic into chemicals comprising:

(a) selecting waste plastics containing polyethylene and/or polypropylene;

(b) preparing a blend of a bio feedstock and the selected plastic, with the blend comprising about 20 wt. % or less of the selected plastic; and

(c) passing the blend to a catalytic conversion unit.

2. A continuous process for converting waste plastic into aromatics and chemical monomers comprising:

(a) selecting waste plastics comprising polyethylene and/or polypropylene;

(b) preparing a blend of a bio feedstock and the selected waste plastic with the blend comprising about 20 wt. % or less of the selected waste plastic;

(c) passing the blend at a temperature above the melting point of the waste plastic in the blend to a FCC unit;

(d) recovering a naphtha mixture from the FCC unit; and

(e) passing the naphtha mixture to an aromatics separation unit.

3. The process of claim 2, wherein benzene, toluene, xylenes, ethylbenzene, or a mixture thereof is recovered from the aromatics separation unit, or p-xylenes are separated and forwarded for polymerization to PET.

4. The process of claim 2, wherein the catalyst in the FCC unit comprises a large pore zeolite or a medium pore zeolite.

5. The process of claim 2, wherein the blend of (b) is a hot homogeneous blend of waste plastic and bio oil, or the blend of bio feedstock and selected waste plastic in (b) is prepared by heating the waste plastic and bio feedstock mixture above the melting point of the plastic, and then cooling the blend to a temperature below the melting point of the waste plastic.

6. The process of claim 2, wherein the waste plastics selected in (a) comprise plastics from classification group 2, 4, and/or 5.

7. The process of claim 2, wherein a C4 stream and a heavy fraction are recovered from the FCC unit distillation column and further processed in the refinery to clean gasoline, diesel, or jet fuel.

8. The process of claim 2, wherein the volume flow of the blend to the refinery FCC unit in (c) comprises up to 100 volume %, or up to 50 volume %, or up to 25 volume % of the total hydrocarbon flow to the FCC unit.

9. The process of claim 2, wherein the bio feedstock comprises triglycerides and/or fatty acids, or the bio feedstock comprises plant-derived oils and/or animal-derived fats and oils, or the plant derived oils comprise palm oil, canola oil, com oil, soybean oil, or a mixture thereof, or the bio feedstock comprises tallow, lard, schmaltz, fish oil, or a mixture thereof.

10. The process of claim 2, wherein the bio feedstock comprises palm oil, tallow, soybean oil or a mixture thereof, or the bio feedstock comprises biomass pyrolysis.

11. The process of claim 2, wherein the bio feedstock comprises bio feedstock or bio feedstocks having an iodine number of 95 or below, or an iodine number of 91 or less.

12. The process of claim 11, wherein the bio feedstock comprises a mixture of a bio oil or fat exhibiting an iodine number of 70 or below, and a bio oil or fat exhibiting an iodine number above 70.

13. The process of claim 1 or 2, wherein a stream of petroleum feedstock comprising LCO or gasoline is added to reduce the blend viscosity.

14. The process of claim 2, wherein the blend passed to the FCC unit is mixed with a petroleum feedstock.

15. The process of claim 14, wherein the petroleum feedstock comprises from 1-50 vol % of the mixed blend.

16. The process of claim 15, wherein the petroleum based feedstock comprises atmospheric gas oil, vacuum gas oil (VGO), atmospheric residue, a petroleum derived oil, a

petroleum based material, and/or heavy stock recovered from refinery operations or the petroleum based feedstock comprises light cycle oil (LCO), heavy cycle oil (HCO), FCC naphtha, gasoline, diesel, toluene, and/or aromatic solvent derived from petroleum.

17. The process of claim 2, wherein the blend passed to the FCC unit is mixed with a recycle stream to thereby lower the blend's viscosity.

18. The process of claim 1, wherein the catalytic conversion unit comprises a hydrocracking unit.

19. The process of claim 18, wherein a heavy fraction is recovered from the hydrocracking unit and forwarded to an isomerization/ dewaxing unit.

20. The process of claim 19, wherein a dewaxed oil is recovered from the isomerization/ dewaxing unit and further processed in a hydrofinishing unit to premium base oil.