CLAIMS

1. A process for converting one or more C_2-C_8 linear or branched olefins to jet and/or diesel fuel, comprising contacting a feed stream comprising the one or more C_2-C_8 linear or branched olefins with a first catalyst and a second catalyst to afford a mixture comprising at least 70 wt % C_{12} or greater alkenes, wherein the first catalyst comprises tungstated zirconium, molybdenum zirconium, or a combination thereof and the second catalyst comprises an acidic ZSM-5 catalyst.

2. The process of claim 1, wherein the one or more C_2-C_8 linear or branched olefins comprise at least about 50 wt% of butenes.

3. The process of claim 2, wherein the one or more C_2-C_8 linear or branched olefins comprise at least about 75 wt% of butenes.

4. The process of claim 3, wherein the one or more C_2-C_8 linear or branched olefins comprise at least about 90 wt% of butenes.

5. The process of claim 4, wherein said butenes comprises at least about 75 wt% isobutene.

6. The process of claim 4, wherein said butenes comprises at least about 75 wt% of linear butenes.

7. The process of claim 1, further comprising dehydrating one or more C_2-C_8 linear or branched alcohols with a third catalyst to provide the feed stream comprising one or more C_2-C_8 linear or branched olefins.

8. The process of claim 7, wherein the feed stream comprising one or more C_2-C_8 linear or branched olefins comprises at least 0.5 wt% oxygenates.

9. The process of claim 8, wherein the feed stream comprising one or more C_2-C_8 linear or branched olefins comprises at least 1 wt% oxygenates.

10. The process of claim 9, wherein the feed stream comprising one or more C_2-C_8 linear or branched olefins comprises at least 2 wt% oxygenates.

11. The process of claim 10, wherein the feed stream comprising one or more C_2-C_8 linear or branched olefins comprises at least 3 wt% oxygenates.

12. The process of claim 8, wherein said oxygenates comprise water and one or more C_2-C_8 linear or branched alcohols.

13. The process of claim 1, wherein a single-pass conversion of said C_2-C_8 olefin is at least about 50%.

14. The process of claim 13, wherein the single-pass conversion of said C_2-C_8 olefin is at least about 60%.

15. The process of claim 14, wherein the single-pass conversion of said C_2-C_8 olefin at least about 70%.

16. The process of claim 15, wherein the yield of said C_{12} or greater alkenes is at least about 75%.

17. The process of claim 1, wherein said first catalyst comprises nickel and/or cobalt doped tungstated zirconium catalysts, nickel and/or cobalt doped molybdenum zirconium catalysts, or combinations thereof.

18. The process of claim 1, wherein said first catalyst is tungstated zirconium catalyst.

19. The process of claim 18, wherein said tungstated zirconium catalyst comprises about 85 wt% zirconium and about 15 wt% tungsten.

20. The process of claim 18, wherein said tungstated zirconium catalyst further comprises from about 0.01 to about 3 wt% of nickel.

21. The process of claim 18, wherein said tungstated zirconium catalyst further comprises from about 0.01 to about 3 wt% of cobalt.

22. The process of claim 1, wherein said first catalyst is nickel and/or cobalt doped molybdenum zirconium catalyst.

23. The process of claim 22, wherein said molybdenum zirconium catalyst comprises about 85 wt% zirconium and about 15 wt% molybdenum.

24. The process of claim 22, wherein said molybdenum zirconium catalyst further comprises from about 0.01 to about 3 wt% of nickel.

25. The process of claim 22, wherein said molybdenum zirconium catalyst further comprises from about 0.01 to about 3 wt% of cobalt.

26. The process of claim 1, wherein said first catalyst further comprises acidic Ferrierite, zeolites, Group IB-VIIB metal doped zeolites, doped zeolites, an acidic zeolite catalyst, or combinations thereof.

27. The process of claim 1, wherein said acidic ZSM-5 further comprises from about 0.01 wt% to about 5 wt% zinc.

28. The process of claim 1, wherein said acidic ZSM-5 further comprises from about 0.01 wt% to about 20 wt% zirconium.

29. The process of claim 1, wherein said first catalyst further comprises an acidic Ferrierite catalyst.

30. The process of claim 29, wherein said acidic Ferrierite further comprises from about 0.01 wt% to about 5 wt% zinc.

31. The process of claim 30, wherein said acidic Ferrierite further comprises from about 0.01 wt% to about 20 wt% zirconium.

32. The process of claim 7, wherein said third catalyst comprises Zeolites, Group IB-VIIB metal doped zeolites) doped zeolites, or combinations thereof.

33. The process of claim 7, wherein said third catalyst comprises an acidic ZSM-5 catalyst.

34. The process of claim 33, wherein said acidic ZSM-5 further comprises from about 0.01 wt% to about 5 wt% zinc.

35. The process of claim 33, wherein said acidic ZSM-5 further comprises from about 0.01 wt% to about 20 wt% zirconium.

36. The process of claim 7, wherein said third catalyst comprises an acidic Ferrierite catalyst.

37. The process of claim 36, wherein said acidic Ferrierite further comprises from about 0.01 wt% to about 5 wt% zinc.

38. The process of claim 36, wherein said acidic Ferrierite further comprises from about 0.01 wt% to about 20 wt% zirconium.