WHAT IS CLAIMED IS:

1. A process for making sustainable jet fuel, the process comprising contacting a hydrocarbonaceous feedstock with a hydroconversion catalyst, wherein the feedstock comprises or is a biofeedstock or a biocomponent feed, and the hydroconversion catalyst comprises zeolite SSZ-91.

2. A process for flexibly making sustainable jet fuel and/or renewable diesel from the same hydrocarbonaceous feedstock, the process comprising contacting a hydrocarbonaceous feedstock with a hydroconversion catalyst, wherein the feedstock comprises or is biofeedstock or a biocomponent feed, and the hydroconversion catalyst comprises zeolite SSZ-91.

3. A process for upgrading a hydrocarbonaceous feedstock, the process comprising:

   contacting a hydrocarbonaceous feedstock with a hydroconversion catalyst under hydroconversion conditions to provide a diesel fuel that is both hydrotreated and hydroisomerized and having a reduced cloud point and/or a reduced pour point compared to the cloud point and pour point of the hydrotreated hydrocarbonaceous feedstock that has not been hydroisomerized, and/or to provide a jet fuel having an improved jet fuel that is both hydrotreated and hydroisomerized and having a boiling point range and/or a reduced jet fuel freezing point compared to the jet fuel boiling point range and/or the jet fuel freezing point of the hydrotreated hydrocarbonaceous feedstock that has not been hydroisomerized;

   wherein the hydrocarbonaceous feedstock comprises or is a biofeedstock or a biocomponent feed, and the hydroconversion catalyst comprises zeolite SSZ-91.

4. A process according to claim 3, wherein the product produced comprises diesel fuel that is both hydrotreated and hydroisomerized and having a reduced cloud point and/or a reduced pour point compared to the cloud point and pour point of the hydrotreated hydrocarbonaceous feedstock that has not been hydroisomerized.

5. A process according to claim 3, wherein the product produced comprises jet fuel that is both hydrotreated and hydroisomerized and having a boiling point range and/or a reduced jet fuel freezing point compared to the jet fuel boiling point range and/or the jet fuel freezing point of the hydrotreated hydrocarbonaceous feedstock that has not been hydroisomerized.

6. A process according to any of claims 2-5, wherein the same hydrocarbonaceous feedstock is used to produce sustainable jet fuel and/or renewable diesel.

7. A process according to any of claims 2-6, wherein the process temperature is adjusted to produce either the jet fuel or diesel products.

8. A process according to any of claims 2-6, wherein a hydrocracking catalyst is not required or is not used to produce either the jet fuel or the diesel products.

9. A process according to any of claims 1-8, wherein the feedstock is contacted with a hydrotreating catalyst under hydrotreating conditions to provide a hydrotreated feedstock prior to contacting the hydrotreated feedstock with the hydroconversion catalyst.

10. A process according to claim 9, wherein the hydrotreating conditions comprise:

a temperature in the range of 300°F to 800°F (149°C to 427°C), or 450°F to 750°F (232°C to 399°C);

a pressure in the range of 15 to 3000 psig (0.10 to 20.68 MPa gauge);

a feed rate of diesel feedstock to the reactor containing the hydrotreating catalyst at a rate in the range from 0.1 to 20 h^{-1} LHSV; and

hydrogen and feedstock fed to the reactor in a ratio from 1000 to 10,000 standard cubic feet H_2 per barrel diesel feedstock (from 180 to 1800 m^3 H_2/m^3 feed).

11. A process according to any of claims 1-10, wherein the feedstock is contacted with a hydroisomerization catalyst under hydroisomerization conditions to provide a hydroisomerized feedstock.

12. A process according to claim 11, wherein the hydroisomerization conditions comprise:

a temperature in the range of 300°F to 800°F (149°C to 427°C), or 450°F to 750°F (232°C to 399°C);

a pressure in the range of 15 to 3000 psig (0.10 to 20.68 MPa gauge);

a feed rate of diesel feedstock to the reactor containing the hydrotreating catalyst at a rate in the range from 0.1 to 20 h^{-1} LHSV; and

hydrogen and feedstock fed to the reactor in a ratio from 1000 to 10,000 standard cubic feet H_2 per barrel diesel feedstock (from 180 to 1800 m^3 H_2/m^3 feed).

13. A process according to any of claims 1-12, wherein the hydroconversion catalyst comprises zeolite SSZ 91 and a Group 8-10 metal.

14. A process according to any of claims 1-13, wherein the hydroconversion catalyst comprises zeolite SSZ-91, wherein the zeolite SSZ-91 has, in its calcined form, an X-ray diffraction pattern substantially as shown in the following Table:

2-Theta[(a)]	d-spacing (nm)	Relative Intensity[(b)]
7.67	1.152	M
8.81	1.003	W
12.61	0.701	W
15.30	0.579	W
21.25	0.418	VS
23.02	0.386	VS
24.91	0.357	W
26.63	0.334	W

29.20	0.306	W
31.51	0.284	W

[(a)] ± 0.20

[(b)] wherein powder XRD patterns provided are based on a relative intensity scale in which the strongest line in the X-ray pattern is assigned a value of 100:
W = weak (> 0 to ≤ 20); M = medium (> 20 to ≤ 40); S = strong (> 40 to ≤ 60);
VS = very strong (> 60 to ≤ 100).

15. A process according to any of claims 1-14, wherein the hydroconversion catalyst comprises zeolite SSZ 91 having a silicon oxide to aluminum oxide ratio of 40 to 220, or 70 to 160, or 80 to 160, or 80 to 140, or 100 to 160.

16. A process according to any of claims 1-15, wherein the hydroconversion catalyst comprises zeolite SSZ 91 having at least 80% polytype 6 of the total ZSM-48-type material present in the zeolite SSZ-91, or at least 90% polytype 6 of the total ZSM-48-type material present in the zeolite SSZ-91.

17. A process according to any of claims 1-16, wherein the hydroconversion catalyst comprises zeolite SSZ-91 and the zeolite SSZ-91 comprises 0.1 to 4.0 wt.% EUO-type molecular sieve phase.

18. A process according to any of claims 1-17, wherein the hydroconversion catalyst comprises zeolite SSZ 91 comprising 0.1 to 4.0 wt.% EU-1.

19. A process according to any of claims 1-18, wherein the hydroconversion catalyst comprises zeolite SSZ 91 having a morphology characterized as polycrystalline aggregates comprising crystallites collectively having an average aspect ratio of 1 to 4.

20. A process according to any of claims 1-19, wherein the hydroconversion catalyst comprises zeolite SSZ 91 having:

    a silicon oxide to aluminum oxide ratio of 40 to 220, or 70 to 160;

    a morphology characterized as polycrystalline aggregates comprising crystallites collectively having an average aspect ratio in the range of 1 to 4;

    at least 80% polytype 6 of the total ZSM-48-type material present in the zeolite SSZ-91; and, 0.1 to 4.0 wt.% EUO-type molecular sieve phase.

21. A process according to any of claims 1-20, wherein the hydroconversion catalyst comprises from 5 to 95 wt. % zeolite SSZ-91, and from 0.05 to 25.0 wt. % of a metal modifier.

22. A process according to any of claims 1-21, wherein the feedstock comprises or is a biofeedstock or a biocomponent feed selected from vegetable oils and animal fats which comprise triglycerides and free fatty acids, for example wherein the biocomponent feed is selected from canola oil, corn oil, soy oils, castor oil, camelina oil, palm oil, and a combination thereof.

23. A process according to claims 1-21, wherein the feedstock comprises or is a biofeedstock or a biocomponent feed selected from canola oil, corn oil, soy oils, castor oil, camelina oil, palm oil,

rapeseed oil, soybean oil, colza oil, tall oil, sunflower oil, hempseed oil, olive oil, linseed oil, coconut oil, castor oil, peanut oil, palm oil, mustard oil, cottonseed oil, tallow, yellow and brown greases, lard, train oil, fats in milk, fish oil, algal oil, sewage sludge, cuphea oil, camelina oil, jatropha oil, curcas oil, babassu oil, palm kernel oil, crambe oil, and the like.

24. A process according to any of claims 2-23, wherein contacting the feedstock and the hydroconversion catalyst provides a diesel fuel exhibiting a lower cloud point and a lower pour point compared to the cloud point and pour point of the hydrotreated feedstock.

25. A process according to any of claims 2-24, wherein the diesel fuel exhibits a cloud point at least 10°C lower than the cloud point of the hydrotreated feedstock and a pour point at least 10°C lower than the pour point of the hydrotreated feedstock, or a cloud point at least 20°C lower than the cloud point of the feedstock and a pour point at least 20°C lower than the pour point of the hydrotreated feedstock, or a cloud point at least 30°C lower than the cloud point of the hydrotreated feedstock and a pour point at least 30°C lower than the pour point of the hydrotreated feedstock.

26. A process for providing a diesel fuel exhibiting a lower cloud point and a lower pour point compared to the cloud point and pour point of a hydrotreated feedstock from which the diesel fuel is produced, the process comprising contacting a diesel feedstock and a hydroconversion catalyst comprising zeolite SSZ 91 under hydroconversion conditions to provide a diesel fuel exhibiting a lower cloud point and a lower pour point compared to the cloud point and pour point of a hydrotreated feedstock from which the diesel fuel is produced, wherein the feedstock comprises or is a biofeedstock or a biocomponent feed.

27. A process for providing a jet fuel exhibiting a reduced jet fuel freezing point and/or an improved jet fuel boiling point range compared to the jet fuel freezing point and/or the jet fuel boiling point range of a hydrotreated feedstock from which the jet fuel is produced, the process comprising contacting a jet fuel feedstock and a hydroconversion catalyst comprising zeolite SSZ-91 under hydroconversion conditions to provide a jet fuel exhibiting a reduced jet fuel freezing point and/or an improved jet fuel boiling point range compared to the jet fuel freezing point and/or the jet fuel boiling point range of a hydrotreated feedstock from which the jet fuel is produced, wherein the feedstock comprises or is a biofeedstock or a biocomponent feed.