











## GLOBAL OIL DEMAND DATA, DETAILS OF A Y/Y IMPLOSION THROUGH MAY

Latest data paint the unprecedented ugliness of the lockdown recessions in terms of global oil demand – which for those economies that publish monthly data by product amounted to a -13 Mb/d y/y cratering for the three months ending in May, which broadly jives with the -16.5 Mb/d demand loss we model for the second quarter as a whole, since the economies tabulated below account for a little more than 80% of global oil demand.

- Through April Asia’s demand losses (at -3.4 Mb/d) were greater, but by May losses across the OECD had climbed to 8 Mb/d, of which 4.3 Mb/d was concentrated in N America alone. Clearly, the US did not want to be the greatest in this context, sadly it was.
- Management of the pandemic was a significant factor determining the severity of the demand losses, with losses in SKorea, Taiwan, New Zealand, Hong Kong standing out positively in Asia, while in Europe Germany stood out positively relative to demand losses in Italy, Spain, France and the UK.
- We’re not persuaded that China’s oil demand ‘data’ tell much of a story, since we question their quality.

### ‘Core’ global oil demand covers about 80% of the total: Details of the black-hole like impact of the lockdown recessions

Demand Growth	All products (3 mma y/y; kb/d)					Gasoline (3 mma y/y; kb/d)					Middle Distillates (3 mma y/y; kb/d)					LPG + Naphtha (3 mma y/y; kb/d)				
	Jun-19	Sep-19	Dec-19	Mar-20	May-20	Jun-19	Sep-19	Dec-19	Mar-20	May-20	Jun-19	Sep-19	Dec-19	Mar-20	May-20	Jun-19	Sep-19	Dec-19	Mar-20	May-20
<b>Global Core</b>	-261	742	1,295	-5,448	-13,047	43	88	-67	-1,529	-5,018	121	578	469	-1,970	-6,142	-167	101	509	-943	-414
EM proxy	119	879	1,413	-3,201	-5,059	167	78	5	-915	-1,429	93	428	540	-1,002	-2,466	-67	193	236	-573	-264
OECD	-381	-137	-118	-2,247	-7,989	-124	10	-72	-615	-3,589	29	151	-71	-968	-3,675	-99	-92	273	-370	-150
<b>Asia</b>	127	538	1,165	-3,398	-4,104	115	-12	-76	-868	-1,047	137	319	512	-1,266	-2,167	-176	265	219	-681	-274
EM Asia	334	633	1,158	-2,931	-3,382	143	7	-64	-774	-818	109	311	502	-1,002	-1,772	-120	201	171	-568	-128
China	277	565	1,035	-2,143	-1,309	46	-63	-143	-734	-444	21	345	479	-567	-467	-13	158	181	-331	-62
India	60	174	179	-205	-1,400	76	58	53	-16	-303	24	-33	-16	-216	-927	-73	131	123	47	107
Thailand	17	43	42	-284	-332	11	9	9	-4	-54	21	35	25	-46	-165	-18	-2	-32	-210	-95
Taiwan	-59	-95	-66	-113	-143	-2	-7	8	-14	-10	7	2	13	-14	-43	-23	-75	-85	-72	-76
Hong Kong	-15	-48	-32	-173	-148	-0	0	0	-0	-2	6	-34	-9	-147	-132	-1	-0	-1	-2	-1
Philippines	53	-6	-1	-12	-51	12	9	10	-6	-5	29	-4	10	-12	-37	7	-10	-15	0	-1
Old Asia	-207	-95	7	-467	-721	-28	-19	-12	-95	-229	28	8	10	-264	-395	-56	63	48	-113	-146
Japan	-27	-97	-143	-363	-425	-35	-15	-25	-47	-147	5	-2	-42	-142	-136	27	-22	-38	-127	-122
South Korea	-155	10	150	-71	-23	9	4	22	-31	2	35	8	40	-119	-87	-85	84	85	15	-20
Australia	-30	-5	0	-22	-232	-3	-7	-9	-14	-70	-15	4	12	1	-148	2	1	0	-2	-4
new zealand	5	-3	0	-12	-41	1	-1	0	-3	-15	3	-2	0	-4	-24	-0	0	0	0	-0
<b>Europe</b>	-10	44	-67	-722	-2,989	27	80	78	-56	-708	34	171	-23	-273	-1,819	-71	-88	65	-134	-122
old Europe	-90	-38	-133	-410	-1,485	15	50	39	-47	-443	55	109	-68	-149	-898	-105	-71	49	-45	-6
Germany	-37	64	38	-98	-146	-8	13	20	-8	-107	53	71	-20	-33	-62	-60	8	80	-42	33
France	23	34	-43	-151	-461	9	16	14	-4	-87	7	21	-39	-75	-307	7	-11	32	-29	-12
UK	-17	-65	-70	-50	-444	-3	1	1	-11	-127	-16	-33	-13	-16	-269	9	-20	-50	0	-15
Netherlands	-58	-87	10	1	-62	1	1	-1	-8	-26	-3	11	33	-1	-52	-25	-11	-17	18	-13
Belgium	-27	-14	-18	-57	-88	8	9	8	-0	-19	-1	-0	-11	4	-16	-45	-3	7	-11	2
Other old Europe	24	29	-49	-54	-285	8	10	-3	-16	-77	14	40	-19	-29	-193	10	-34	-3	19	-1
New Europe	80	82	66	-311	-1,504	12	30	39	-9	-265	-21	62	45	-124	-920	34	-17	17	-88	-116
Spain	11	-7	-34	-104	-397	6	6	5	-9	-68	2	8	16	-27	-259	-3	-10	2	-10	-0
Italy	-55	-41	-28	-158	-452	-8	5	20	4	-68	-39	-24	-26	-85	-271	7	-18	-5	-65	-70
Greece	19	20	-5	-21	-49	1	2	0	-4	-19	8	7	4	-2	-8	2	3	0	-1	-2
Turkey	18	13	126	14	-211	2	6	6	2	-15	-25	24	44	-17	-167	-3	9	24	-4	-5
Poland	19	8	18	-5	-95	6	5	1	-1	-27	16	13	1	-3	-55	6	-5	12	-3	-11
Other new Europe	69	91	-12	-37	-300	5	6	6	-0	-68	16	33	6	10	-160	26	4	-15	-6	-28
<b>Americas</b>	-254	-27	-19	-1,213	-5,042	-69	2	-88	-515	-2,981	-36	31	-61	-398	-1,775	33	-102	136	-178	93
N America	-164	-86	-59	-1,058	-4,278	-123	-51	-138	-464	-2,651	-33	-28	-58	-430	-1,462	27	-68	160	-122	118
United States	-47	-38	-26	-952	-3,518	-29	-32	-94	-457	-2,299	-42	-104	-42	-385	-1,164	-22	-43	72	-94	153
Canada	-121	-86	-96	22	-293	-62	-8	-24	56	-115	-20	30	-46	-2	-142	58	-20	35	-32	-1
Mexico	5	38	63	-128	-467	-32	-11	-20	-63	-238	29	46	30	-43	-156	-9	-5	53	4	-34
Latam	-90	59	40	-154	-764	54	53	50	-50	-329	-3	59	-3	32	-314	5	-35	-25	-55	-25
Brazil	-80	43	35	-82	-517	47	41	39	-26	-244	-9	48	-10	33	-190	8	-32	-39	-42	-7
Other latam	-10	16	5	-73	-248	7	11	12	-25	-85	6	11	7	-1	-123	-2	-2	14	-13	-18
<b>Mideast</b>	-124	188	215	-116	-912	-30	18	19	-91	-282	-13	57	41	-32	-381	47	26	89	50	-111
Saudi Arabia	-89	182	186	-0	-446	-32	-5	-12	-75	-190	-23	43	24	-11	-99	38	21	81	53	-104
Iraq	25	9	-3	-26	-119	10	9	0	-17	-34	16	3	3	-13	-54	-1	-3	-7	5	3
Kuwait	-11	-9	68	-6	-48	-6	6	38	6	-13	-7	11	23	-9	-40	-3	-8	8	-3	-1
Qatar	4	4	3	-18	-148	-7	2	-6	-2	-13	-6	-17	-8	-16	-133	16	19	17	0	-1
Israel	-0	12	-2	-6	-41	0	3	-1	-2	-13	-0	5	-1	-1	-15	-1	1	-1	-2	-6
Egypt	-53	-10	-36	-60	-110	6	3	-0	-1	-18	7	11	-1	-4	-39	-2	-3	-9	-3	-1

\*Oil demand growth for those countries that report monthly data by product

\*Old Europe equals northwest europe

\*Old Asia Pac is Japan, South Korea, Australia and New Zealand

Source: IEA, Jodi, BP, Bloomberg, National Statistical Agencies, CSM Research

## Reference Tables: More details behind our base case

## Global oil balance (total liquids) summary

Global Oil Balances	2012	2013	2014	2015	2016	2017	2018	Q1-'19	Q2-'19	Q3-'19	Q4-'19	2019	Q1-'20	Q2-'20	Q3-'20	Q4-'20	2020	Q1-'21	Q2-'21	Q3-'21	Q4-'21	2021
<b>Supply</b>	<b>91.3</b>	<b>91.9</b>	<b>94.2</b>	<b>97.2</b>	<b>97.6</b>	<b>98.2</b>	<b>101.0</b>	<b>100.8</b>	<b>100.4</b>	<b>100.2</b>	<b>102.2</b>	<b>100.9</b>	<b>100.9</b>	<b>92.0</b>	<b>93.7</b>	<b>97.9</b>	<b>96.1</b>	<b>99.0</b>	<b>98.9</b>	<b>99.0</b>	<b>99.1</b>	<b>99.0</b>
yoy	2.3	0.6	2.3	3.0	0.4	0.7	2.8	1.6	-0.2	-1.4	-0.6	-0.1	0.1	-8.4	-6.4	-4.2	-4.8	-1.9	6.9	5.2	1.2	2.9
Opec	36.3	35.3	35.3	36.8	37.9	37.8	37.8	36.6	35.7	34.9	35.7	35.7	34.4	31.8	31.9	35.0	33.3	35.9	35.8	36.1	36.4	36.0
yoy	1.4	-1.0	0.0	1.5	1.1	-0.1	0.0	-0.8	-2.3	-2.9	-2.2	-2.1	-2.2	-3.9	-3.1	-0.7	-2.5	1.5	4.0	4.2	1.4	2.8
Opec crude	31.5	30.4	30.1	31.6	32.3	32.2	32.3	31.2	30.4	29.7	30.4	30.4	29.2	26.7	26.8	29.6	28.1	30.5	30.5	30.7	31.1	30.7
yoy	1.3	-1.1	-0.3	1.5	0.7	0.0	0.1	-0.8	-2.0	-2.7	-2.2	-1.9	-2.0	-3.7	-2.9	-0.7	-2.3	1.3	3.8	3.9	1.4	2.6
Saudi crude	9.8	9.6	9.7	10.2	10.2	9.9	10.2	10.1	9.8	9.4	9.9	9.8	9.7	9.4	9.0	10.3	9.6	10.3	10.3	10.3	10.3	10.3
yoy	0.5	-0.1	0.1	0.5	0.0	-0.3	0.2	0.5	-0.4	-0.8	-0.8	-0.4	-0.4	-0.4	-0.4	0.5	-0.2	0.6	0.9	1.3	0.0	0.7
Non Opec	52.5	54.1	56.4	57.8	57.1	57.8	60.6	61.6	61.9	62.5	63.8	62.5	63.8	57.4	59.2	60.3	60.2	60.4	60.2	60.2	60.0	60.2
yoy	0.8	1.6	2.3	1.5	-0.7	0.7	2.8	2.4	2.1	1.5	1.6	1.9	2.2	-4.5	-3.4	-3.6	-2.3	-3.4	2.9	1.0	-0.3	0.1
US crude	6.5	7.5	8.8	9.4	8.8	9.4	11.0	11.8	12.1	12.2	12.8	12.2	12.7	10.2	11.2	11.1	11.3	10.9	10.6	10.5	10.4	10.6
yoy	0.9	1.0	1.3	0.7	-0.6	0.5	1.6	1.5	1.6	1.0	0.9	1.2	0.9	-1.9	-1.1	-1.7	-0.9	-1.9	0.4	-0.7	-0.8	-0.7
<b>Demand</b>	<b>91.1</b>	<b>92.6</b>	<b>93.4</b>	<b>95.3</b>	<b>97.0</b>	<b>98.8</b>	<b>100.2</b>	<b>100.3</b>	<b>100.2</b>	<b>102.0</b>	<b>101.9</b>	<b>101.1</b>	<b>94.2</b>	<b>83.6</b>	<b>94.3</b>	<b>98.1</b>	<b>92.6</b>	<b>98.9</b>	<b>98.1</b>	<b>100.6</b>	<b>100.9</b>	<b>99.6</b>
yoy %	1.3%	1.6%	1.0%	2.0%	1.8%	1.9%	1.4%	0.8%	0.1%	1.1%	1.6%	0.9%	-6.1%	-16.5%	-7.6%	-3.8%	-8.4%	5.0%	17.3%	6.7%	2.9%	7.6%
yoy	1.2	1.4	0.9	1.9	1.7	1.8	1.4	0.8	0.1	1.1	1.6	0.9	-6.1	-16.5	-7.8	-3.8	-8.5	4.7	14.5	6.3	2.8	7.1
Non-OECD	45.1	46.4	47.6	48.7	50.0	51.2	52.3	52.6	53.2	53.9	54.1	53.5	48.8	45.7	50.5	52.5	49.4	52.3	52.7	53.5	54.1	53.2
yoy %	3.7%	3.0%	2.5%	2.3%	2.6%	2.4%	2.1%	2.6%	1.0%	2.4%	3.2%	2.3%	-7.2%	-14.2%	-6.3%	-3.0%	-7.6%	7.1%	15.4%	5.9%	3.0%	7.6%
yoy	1.6	1.4	1.2	1.1	1.3	1.2	1.1	1.3	0.5	1.3	1.7	1.2	-3.8	-7.5	-3.4	-1.6	-4.1	3.5	7.0	3.0	1.6	3.8
OECD	46.1	46.1	45.8	46.6	47.0	47.6	47.9	47.6	46.9	48.1	47.8	47.6	45.4	38.0	43.7	45.6	43.2	46.6	45.4	47.1	46.8	46.5
yoy %	-0.9%	0.2%	-0.6%	1.6%	0.9%	1.3%	0.7%	-1.1%	-0.9%	-0.4%	-0.2%	-0.6%	-4.8%	-19.1%	-9.1%	-4.6%	-9.4%	2.7%	19.6%	7.7%	2.7%	7.7%
yoy	-0.4	0.1	-0.3	0.8	0.4	0.6	0.3	-0.5	-0.4	-0.2	-0.1	-0.3	-2.3	-9.0	-4.4	-2.2	-4.5	1.2	7.4	3.4	1.2	3.3
<b>Implied Inventory Change</b>	<b>0.2</b>	<b>-0.6</b>	<b>0.8</b>	<b>1.9</b>	<b>0.6</b>	<b>-0.6</b>	<b>0.8</b>	<b>0.5</b>	<b>0.2</b>	<b>-1.9</b>	<b>0.3</b>	<b>-0.2</b>	<b>6.7</b>	<b>8.3</b>	<b>-0.5</b>	<b>-0.1</b>	<b>3.6</b>	<b>0.1</b>	<b>0.8</b>	<b>-1.6</b>	<b>-1.8</b>	<b>-0.6</b>
<b>Reported Inventory Change</b>	<b>0.3</b>	<b>0.1</b>	<b>0.9</b>	<b>1.6</b>	<b>0.4</b>	<b>-0.7</b>	<b>0.6</b>	<b>1.1</b>	<b>1.0</b>	<b>-0.5</b>	<b>0.7</b>	<b>0.6</b>	<b>4.8</b>									
OECD commercial	0.2	-0.3	0.4	0.8	0.0	-0.4	0.0	0.0	0.7	0.1	-0.4	0.1	0.9									
Non-OECD commercial	0.1	0.3	0.3	0.2	-0.1	-0.2	0.0	0.5	-0.1	-0.5	0.2	0.0	1.4									
Independent	0.0	0.0	0.0	0.2	0.0	-0.1	0.0	0.1	-0.1	0.0	0.0	0.0	0.2									
Floating Storage	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	0.2	0.2	0.0	0.1	0.6									
Oil in Transit	0.0	0.0	0.1	0.2	0.2	-0.2	0.0	-0.3	-0.5	-0.5	0.4	-0.2	0.0									
Government	0.0	0.0	0.1	0.2	0.3	0.3	0.5	0.7	0.7	0.2	0.6	0.6	1.8									
<b>Reported Inventory Levels</b>	<b>6,693</b>	<b>6,712</b>	<b>7,041</b>	<b>7,639</b>	<b>7,776</b>	<b>7,538</b>	<b>7,748</b>	<b>7,845</b>	<b>7,937</b>	<b>7,892</b>	<b>7,961</b>	<b>7,961</b>	<b>8,402</b>	<b>9,125</b>	<b>9,077</b>	<b>9,058</b>	<b>9,058</b>	<b>9,061</b>	<b>9,113</b>	<b>8,973</b>	<b>8,815</b>	<b>8,815</b>
OECD commercial	2,662	2,568	2,711	2,994	3,007	2,860	2,875	2,878	2,938	2,948	2,911	2,911	2,994	3,244	3,210	3,197	3,197	3,199	3,235	3,137	3,027	3,027
Non-OECD commercial	1,517	1,633	1,731	1,814	1,766	1,709	1,726	1,773	1,767	1,724	1,744	1,744	1,869									
Independent	148	148	160	235	218	178	183	193	187	183	183	183	199									
Floating Storage	43	43	50	66	82	36	27	27	49	65	65	65	118									
Oil in Transit	729	729	776	837	905	848	846	816	771	727	760	760	756									
Government	1,595	1,591	1,612	1,693	1,797	1,908	2,091	2,158	2,225	2,245	2,298	2,298	2,466									
<b>Inventory Demand Cover*</b>	<b>54.9</b>	<b>54.9</b>	<b>56.7</b>	<b>61.7</b>	<b>60.9</b>	<b>55.7</b>	<b>55.0</b>	<b>56.1</b>	<b>55.7</b>	<b>55.5</b>	<b>58.8</b>	<b>58.8</b>	<b>73.9</b>	<b>69.5</b>	<b>65.9</b>	<b>65.0</b>	<b>65.0</b>	<b>66.2</b>	<b>64.5</b>	<b>62.9</b>	<b>62.0</b>	<b>62.0</b>
Including China SPR	55.5	55.0	57.1	63.0	63.3	59.7	61.3	63.2	63.5	63.6	68.1	68.1	87.3									
OECD	57.6	55.6	57.7	64.0	64.4	59.5	59.8	61.4	60.5	61.5	62.5	62.5	81.5	74.2	70.4	67.9	67.9	71.0	68.0	66.8	63.6	63.6
Non-OECD	45.0	48.1	49.1	49.9	47.9	44.8	43.4	44.1	43.7	42.0	47.0	47.0	55.4									
Including China SPR	46.5	48.3	50.0	53.0	53.5	54.2	57.6	59.7	61.2	59.8	68.5	68.5	84.2									

Source: IEA, BP, Jodi, Petro-logistics, Rystad Energy, Country Data, Bloomberg, CSM Research

## Global oil demand growth summary

	growth (y/y, kb/d)														
	2015	2016	2017	2018	Q1-'19	Q2-'19	Q3-'19	Q4-'19	2019	Q1-'20	Q2-'20	Q3-'20	Q4-'20	2020	2021
<b>Global</b>	<b>1,860</b>	<b>1,690</b>	<b>1,800</b>	<b>1,410</b>	<b>810</b>	<b>80</b>	<b>1,070</b>	<b>1,600</b>	<b>890</b>	<b>-6,070</b>	<b>-16,520</b>	<b>-7,770</b>	<b>-3,840</b>	<b>-8,540</b>	<b>7,070</b>
<b>Asia</b>	<b>1,180</b>	<b>1,420</b>	<b>1,120</b>	<b>830</b>	<b>670</b>	<b>270</b>	<b>660</b>	<b>1,370</b>	<b>740</b>	<b>-3,770</b>	<b>-4,410</b>	<b>-1,560</b>	<b>-810</b>	<b>-2,630</b>	<b>2,480</b>
China	670	630	540	570	580	280	570	1,040	620	-2,130	-800	-510	-380	-960	850
India	330	410	220	280	230	70	180	170	170	-210	-1,240	-140	20	-390	600
Japan*	-120	-130	-100	-140	-270	-30	-100	-150	-140	-360	-420	-240	-130	-280	200
South Korea*	120	130	30	-60	-90	-160	10	150	-20	-70	0	-10	10	-20	40
Thailand	50	30	50	30	20	20	50	50	40	-280	-290	-140	-60	-190	150
Australia*	0	-10	50	20	-10	-30	0	0	-10	-20	-280	-110	-40	-120	110
Taiwan	10	30	20	10	10	-60	-90	-70	-60	-120	-130	-80	-40	-90	60
Philippines	50	30	30	10	10	50	0	0	10	-20	-50	-30	-20	-30	20
Hong Kong	30	10	50	10	60	-10	-50	-40	-20	-170	-120	-60	-50	-90	20
Other	50	280	230	110	130	140	90	220	150	-390	-1,080	-240	-120	-460	410
<b>North America</b>	<b>450</b>	<b>230</b>	<b>240</b>	<b>600</b>	<b>-130</b>	<b>-160</b>	<b>-80</b>	<b>-50</b>	<b>-110</b>	<b>-1,080</b>	<b>-4,730</b>	<b>-2,400</b>	<b>-1,330</b>	<b>-2,380</b>	<b>1,600</b>
United States*	430	160	270	540	-50	-50	-40	-20	-40	-970	-3,720	-1,790	-1,050	-1,880	1,190
Canada*	50	30	-10	60	-110	-120	-80	-90	-100	20	-450	-350	-160	-230	180
Mexico*	-30	40	-30	-10	30	0	40	60	40	-130	-530	-250	-120	-260	200
Other*	0	0	0	10	0	0	0	0	0	0	-30	-10	0	-10	20
<b>South America</b>	<b>-50</b>	<b>-230</b>	<b>0</b>	<b>20</b>	<b>-80</b>	<b>-120</b>	<b>50</b>	<b>30</b>	<b>-30</b>	<b>-260</b>	<b>-1,000</b>	<b>-290</b>	<b>40</b>	<b>-380</b>	<b>440</b>
Brazil	-70	-180	90	30	-40	-80	50	30	-10	-80	-430	-140	0	-160	190
Venezuela	-80	-110	-70	-50	-40	-40	-40	-40	-40	-40	-40	-20	10	-20	20
Other	100	60	-20	40	0	0	40	40	20	-140	-530	-130	30	-190	210
<b>Europe</b>	<b>320</b>	<b>220</b>	<b>400</b>	<b>-100</b>	<b>0</b>	<b>20</b>	<b>50</b>	<b>-80</b>	<b>0</b>	<b>-720</b>	<b>-3,490</b>	<b>-1,630</b>	<b>-720</b>	<b>-1,640</b>	<b>1,380</b>
Germany*	0	20	60	-120	50	-30	60	30	30	-100	-280	-260	-110	-180	140
France*	-10	-30	20	-40	-10	20	40	-40	0	-150	-490	-220	-100	-240	200
UK*	40	30	40	-20	0	-20	-60	-70	-40	-50	-540	-230	-120	-230	160
Italy*	10	-40	0	30	-70	-60	-40	-30	-50	-160	-420	-170	-80	-200	160
Other	280	230	270	60	30	110	50	30	50	-260	-1,760	-750	-310	-770	700
<b>CIS</b>	<b>-180</b>	<b>90</b>	<b>10</b>	<b>60</b>	<b>140</b>	<b>80</b>	<b>70</b>	<b>70</b>	<b>90</b>	<b>80</b>	<b>-640</b>	<b>-460</b>	<b>-210</b>	<b>-300</b>	<b>430</b>
<b>Mideast</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-20</b>	<b>270</b>	<b>30</b>	<b>260</b>	<b>290</b>	<b>210</b>	<b>-220</b>	<b>-1,550</b>	<b>-1,110</b>	<b>-650</b>	<b>-880</b>	<b>480</b>
Saudi Arabia	130	-20	-30	-110	80	-90	180	190	90	-10	-680	-580	-330	-400	260
Iran	-150	-60	90	40	0	0	0	0	0	-30	0	0	0	-10	0
Other	30	70	-70	60	190	120	80	100	120	-180	-870	-530	-320	-470	210
<b>Africa</b>	<b>120</b>	<b>-30</b>	<b>40</b>	<b>10</b>	<b>-60</b>	<b>-30</b>	<b>70</b>	<b>-40</b>	<b>-20</b>	<b>-100</b>	<b>-720</b>	<b>-320</b>	<b>-150</b>	<b>-320</b>	<b>270</b>
<b>OECD (DM)</b>	<b>750</b>	<b>420</b>	<b>610</b>	<b>320</b>	<b>-520</b>	<b>-430</b>	<b>-200</b>	<b>-100</b>	<b>-310</b>	<b>-2,280</b>	<b>-8,980</b>	<b>-4,390</b>	<b>-2,200</b>	<b>-4,460</b>	<b>3,310</b>
<b>Non-OECD (EM)</b>	<b>1,110</b>	<b>1,260</b>	<b>1,200</b>	<b>1,090</b>	<b>1,330</b>	<b>510</b>	<b>1,270</b>	<b>1,700</b>	<b>1,200</b>	<b>-3,790</b>	<b>-7,540</b>	<b>-3,380</b>	<b>-1,640</b>	<b>-4,080</b>	<b>3,760</b>

\*OECD countries

Source: IEA, BP, Jodi, Country Data, Bloomberg, CSM Research



## Global oil supply growth summary (total liquids)

	growth (y/y, kb/d)															
	2014	2015	2016	2017	2018	Q1-'19	Q2-'19	Q3-'19	Q4-'19	2019	Q1-'20	Q2-'20	Q3-'20	Q4-'20	2020	2021
<b>Global</b>	<b>2,280</b>	<b>2,990</b>	<b>370</b>	<b>670</b>	<b>2,790</b>	<b>1,580</b>	<b>-150</b>	<b>-1,390</b>	<b>-1,520</b>	<b>-150</b>	<b>120</b>	<b>-8,380</b>	<b>-6,420</b>	<b>-4,240</b>	<b>-4,750</b>	<b>2,860</b>
<b>Mideast</b>	<b>270</b>	<b>1,590</b>	<b>1,790</b>	<b>-350</b>	<b>250</b>	<b>-410</b>	<b>-2,170</b>	<b>-2,060</b>	<b>-1,520</b>	<b>-1,540</b>	<b>-900</b>	<b>-1,960</b>	<b>-2,460</b>	<b>110</b>	<b>-1,300</b>	<b>2,370</b>
Saudi Arabia	120	490	400	-520	400	600	-530	-910	-970	-460	-500	-455	-520	520	-240	840
Iran	100	140	740	430	-310	-1,060	-2,090	-1,500	-650	-1,320	-710	-660	-230	120	-370	480
Iraq	140	750	430	110	90	140	240	-30	-220	30	-50	-500	-280	40	-200	380
UAE	20	300	140	-130	30	-10	270	240	390	220	340	-30	-780	-480	-240	290
Kuwait	-30	-30	70	-140	50	-60	-110	-70	-160	-100	20	-155	-460	-80	-170	320
Qatar	-20	-40	10	-70	10	-50	80	230	130	100	-10	-90	-130	0	-60	20
Oman	0	40	30	-40	10	0	0	-10	-30	-10	30	-60	-70	-30	-30	50
Other	-80	-40	-20	-10	-10	30	-30	-10	-10	-10	-20	-10	10	20	0	0
<b>CIS</b>	<b>-20</b>	<b>120</b>	<b>190</b>	<b>120</b>	<b>280</b>	<b>430</b>	<b>-10</b>	<b>10</b>	<b>-150</b>	<b>60</b>	<b>-30</b>	<b>-1,240</b>	<b>-2,040</b>	<b>-770</b>	<b>-1,020</b>	<b>870</b>
Russia	50	150	260	-10	180	390	170	-20	-160	90	-30	-1,190	-1,790	-780	-950	930
Kazakhstan	-30	-20	-30	180	90	50	-130	50	40	0	30	0	-170	40	-20	0
Other	-40	-10	-30	-60	10	-10	-50	-20	-30	-30	-30	-50	-80	-30	-50	-60
<b>North America</b>	<b>1,930</b>	<b>970</b>	<b>-450</b>	<b>980</b>	<b>2,530</b>	<b>1,960</b>	<b>2,120</b>	<b>1,010</b>	<b>1,210</b>	<b>1,570</b>	<b>1,690</b>	<b>-2,820</b>	<b>-1,080</b>	<b>-2,120</b>	<b>-1,090</b>	<b>-930</b>
United States	1,760	1,010	-360	820	2,260	2,050	1,960	1,070	1,240	1,580	1,410	-2,400	-1,000	-1,930	-990	-800
Canada	280	100	80	380	420	130	360	70	-10	140	200	-420	-30	-110	-90	-30
Mexico	-90	-200	-140	-230	-160	-240	-210	-140	-20	-150	60	-10	-70	-100	-30	-110
<b>South America</b>	<b>300</b>	<b>130</b>	<b>-400</b>	<b>-170</b>	<b>-510</b>	<b>-320</b>	<b>-360</b>	<b>-360</b>	<b>-130</b>	<b>-300</b>	<b>80</b>	<b>-470</b>	<b>240</b>	<b>-220</b>	<b>-90</b>	<b>-40</b>
Brazil	280	220	60	150	60	30	100	380	430	230	470	170	530	250	360	90
Venezuela	10	-60	-280	-260	-580	-420	-490	-830	-580	-580	-390	-460	-50	-230	-280	40
Ecuador	30	-20	10	-20	-10	20	10	30	0	10	10	10	-10	10	10	-60
Other	-10	-10	-190	-40	20	50	20	60	20	40	-10	-190	-230	-250	-170	-130
<b>Europe</b>	<b>30</b>	<b>160</b>	<b>30</b>	<b>-40</b>	<b>-20</b>	<b>-100</b>	<b>-240</b>	<b>-160</b>	<b>-30</b>	<b>-130</b>	<b>180</b>	<b>160</b>	<b>-110</b>	<b>-370</b>	<b>-40</b>	<b>270</b>
Norway	50	60	50	-30	-120	-190	-220	-150	90	-110	280	410	230	-70	210	220
UK	-10	110	40	-20	100	110	30	30	-30	30	-70	-210	-310	-290	-220	60
Other	-10	-10	-50	0	0	-20	-50	-40	-90	-50	-30	-40	-30	-10	-20	-20
<b>Africa</b>	<b>-320</b>	<b>-60</b>	<b>-480</b>	<b>430</b>	<b>370</b>	<b>10</b>	<b>410</b>	<b>130</b>	<b>-40</b>	<b>130</b>	<b>-910</b>	<b>-1,770</b>	<b>-820</b>	<b>-690</b>	<b>-1,050</b>	<b>480</b>
Nigeria	-10	-70	-300	90	70	140	230	290	190	210	120	-110	60	0	20	-60
Angola	-40	100	-60	-60	-150	-80	-40	-80	-50	-60	-60	-100	-80	-100	-80	-40
Algeria	100	-30	20	-40	140	80	-30	-260	-220	-110	-150	-300	-90	-60	-150	40
Libya	-460	-40	-20	430	240	-210	210	190	-10	50	-680	-1,180	-630	-430	-730	590
Equatorial Guinea	0	-20	-40	-20	-10	-30	0	-30	10	-10	0	10	-10	-10	-10	-20
Gabon	0	0	10	-10	-20	30	20	30	50	30	-70	40	0	-30	-10	-20
Other	70	10	-100	50	100	80	20	-10	-10	20	-70	-130	-70	-60	-80	-40
<b>Asia</b>	<b>70</b>	<b>80</b>	<b>-300</b>	<b>-290</b>	<b>-110</b>	<b>10</b>	<b>80</b>	<b>50</b>	<b>-30</b>	<b>30</b>	<b>0</b>	<b>-270</b>	<b>-160</b>	<b>-160</b>	<b>-150</b>	<b>-150</b>
China	30	90	-300	-150	-60	80	60	80	-10	50	60	-20	-10	-10	0	-110
India	-20	-20	-20	10	-10	-50	-60	-40	-50	-50	-60	-50	-30	-20	-40	-10
Australia	10	-40	-30	-20	30	60	130	130	130	110	60	60	20	-10	30	40
Other	50	50	40	-130	-50	-80	-50	-120	-100	-90	-60	-260	-140	-120	-150	-50
<b>Opec</b>	<b>20</b>	<b>1,480</b>	<b>1,120</b>	<b>-100</b>	<b>0</b>	<b>-830</b>	<b>-2,300</b>	<b>-2,930</b>	<b>-2,230</b>	<b>-2,080</b>	<b>-2,150</b>	<b>-3,900</b>	<b>-3,070</b>	<b>-720</b>	<b>-2,460</b>	<b>2,780</b>
<b>Non-Opec</b>	<b>2,270</b>	<b>1,450</b>	<b>-730</b>	<b>730</b>	<b>2,770</b>	<b>2,380</b>	<b>2,130</b>	<b>1,520</b>	<b>1,560</b>	<b>1,900</b>	<b>2,240</b>	<b>-4,510</b>	<b>-3,380</b>	<b>-3,550</b>	<b>-2,310</b>	<b>50</b>
Nopexus	510	440	-370	-90	510	330	170	450	320	320	830	-2,110	-2,380	-1,620	-1,320	850
Processing Gains	-10	70	-20	40	20	30	20	20	20	30	30	30	30	30	20	30
<b>Opec crude</b>	<b>-320</b>	<b>1,510</b>	<b>670</b>	<b>-40</b>	<b>70</b>	<b>-810</b>	<b>-2,020</b>	<b>-2,660</b>	<b>-2,160</b>	<b>-1,920</b>	<b>-1,980</b>	<b>-3,680</b>	<b>-2,880</b>	<b>-720</b>	<b>-2,310</b>	<b>2,610</b>
Saudi Crude	70	530	-40	-280	240	500	-430	-750	-810	-380	-420	-365	-410	450	-180	700
US Crude	1,300	650	-600	510	1,640	1,540	1,560	980	890	1,240	930	-1,860	-1,070	-1,680	-920	-730

Source: IEA, BP, Jodi, Petro-logistics, Rystad Energy, Country Data, Bloomberg, CSM Research

## Global crude oil and condensate balance summary

	2014	2015	2016	2017	2018	2019	Q1-'20	Q2-'20	Q3-'20	Q4-'20	2020	Q1-'21	Q2-'21	Q3-'21	Q4-'21	2021
<b>Supply</b>	<b>79.6</b>	<b>82.5</b>	<b>82.1</b>	<b>82.5</b>	<b>84.4</b>	<b>83.9</b>	<b>83.9</b>	<b>75.7</b>	<b>76.8</b>	<b>81.1</b>	<b>79.4</b>	<b>82.4</b>	<b>81.9</b>	<b>81.9</b>	<b>82.3</b>	<b>82.1</b>
yoy	1.5	2.9	-0.4	0.3	2.0	-0.5	-0.3	-7.5	-6.2	-3.9	-4.5	-1.5	6.2	5.1	1.2	2.8
North America	15.0	15.5	14.8	15.5	17.3	18.5	19.2	16.1	17.3	17.3	17.5	16.9	16.6	16.5	16.3	16.6
yoy	1.5	0.6	-0.7	0.6	1.9	1.2	1.2	-2.3	-1.2	-1.9	-1.0	-2.3	0.6	-0.8	-1.0	-0.9
South America	6.9	7.5	7.0	6.7	6.2	5.9	6.0	5.4	6.0	5.9	5.8	5.8	5.7	5.7	5.7	5.8
yoy	0.2	0.5	-0.4	-0.3	-0.5	-0.3	0.1	-0.3	0.3	-0.2	0.0	-0.2	0.4	-0.3	-0.1	-0.1
Europe	3.9	4.0	4.0	3.9	3.9	3.7	4.0	3.7	3.5	3.6	3.7	4.0	3.9	3.8	3.9	3.9
yoy	0.0	0.1	0.0	-0.1	0.0	-0.1	0.1	0.1	-0.1	-0.4	-0.1	0.0	0.2	0.4	0.4	0.2
Mideast	25.7	27.3	28.8	28.6	28.8	27.3	27.1	25.3	24.5	27.4	26.1	28.1	28.1	28.4	28.8	28.4
yoy	0.2	1.6	1.4	-0.2	0.2	-1.4	-0.8	-1.9	-2.3	0.1	-1.2	1.0	2.8	3.9	1.4	2.3
of which Opec	24.4	26.0	27.4	27.3	27.5	26.1	25.9	24.2	23.3	26.3	24.9	26.9	26.9	27.2	27.6	27.1
yoy	0.3	1.6	1.4	-0.2	0.2	-1.4	-0.8	-1.8	-2.3	0.1	-1.2	1.0	2.7	3.9	1.3	2.2
Africa	7.9	7.7	7.3	7.7	8.0	8.1	7.1	6.5	7.4	7.5	7.1	7.7	7.6	7.5	7.5	7.6
yoy	-0.3	-0.1	-0.5	0.4	0.4	0.1	-0.9	-1.7	-0.8	-0.7	-1.0	0.6	1.1	0.2	0.0	0.5
of which Opec	6.3	6.1	5.8	6.1	6.4	6.4	5.5	4.9	5.7	5.8	5.5	6.1	6.0	5.9	5.9	6.0
yoy	-0.4	-0.1	-0.4	0.4	0.2	0.1	-0.8	-1.6	-0.7	-0.6	-0.9	0.6	1.1	0.2	0.1	0.5
Asia	7.6	7.7	7.3	7.0	6.9	6.9	6.8	6.7	6.7	6.7	6.7	6.6	6.6	6.5	6.5	6.5
yoy	0.0	0.1	-0.4	-0.3	-0.2	0.0	-0.1	-0.3	-0.1	-0.2	-0.2	-0.2	-0.1	-0.2	-0.2	-0.2
CIS	12.6	12.7	12.9	13.1	13.4	13.5	13.6	12.1	11.5	12.8	12.5	13.3	13.4	13.4	13.5	13.4
yoy	0.0	0.1	0.2	0.2	0.3	0.1	0.0	-1.2	-1.9	-0.7	-1.0	-0.3	1.3	1.9	0.7	0.9
<b>Implied Stock Change</b>	<b>0.7</b>	<b>1.3</b>	<b>0.4</b>	<b>-0.7</b>	<b>0.7</b>	<b>0.4</b>	<b>3.1</b>	<b>7.6</b>	<b>-0.1</b>	<b>-0.1</b>	<b>2.6</b>	<b>0.0</b>	<b>0.5</b>	<b>-1.0</b>	<b>-0.8</b>	<b>-0.3</b>
<b>Refinery Runs</b>	<b>77.8</b>	<b>80.0</b>	<b>80.7</b>	<b>82.1</b>	<b>82.7</b>	<b>82.5</b>	<b>80.0</b>	<b>67.1</b>	<b>75.8</b>	<b>80.2</b>	<b>75.8</b>	<b>81.5</b>	<b>80.5</b>	<b>81.8</b>	<b>82.1</b>	<b>81.5</b>
yoy	1.3	2.2	0.7	1.4	0.6	-0.2	-2.6	-14.4	-7.9	-2.0	-6.7	1.5	13.4	6.0	2.0	5.7
North America	18.7	19.0	18.7	19.1	19.2	18.9	18.1	14.9	17.4	18.0	17.1	17.7	17.1	19.1	18.6	18.1
yoy	0.5	0.2	-0.2	0.4	0.1	-0.3	-0.4	-4.2	-2.0	-0.6	-1.8	-0.4	2.3	1.7	0.5	1.0
South America	4.8	5.0	4.7	4.4	4.1	3.8	3.9	2.6	3.5	3.7	3.4	3.9	3.5	3.8	3.7	3.7
yoy	0.1	0.2	-0.3	-0.3	-0.3	-0.3	0.1	-1.2	-0.4	-0.1	-0.4	0.0	0.9	0.3	0.0	0.3
Europe	12.2	12.9	12.8	13.0	12.7	12.7	12.2	8.5	10.9	12.1	10.9	12.1	12.2	12.5	12.6	12.3
yoy	0.0	0.7	-0.1	0.3	-0.3	0.0	-0.6	-3.9	-2.2	-0.5	-1.8	-0.1	3.7	1.5	0.5	1.4
Mideast	7.3	7.6	7.9	8.2	8.3	8.2	7.7	7.0	7.3	7.6	7.4	7.2	8.3	8.0	7.8	7.8
yoy	0.2	0.4	0.3	0.3	0.1	-0.1	-0.6	-1.2	-1.0	-0.3	-0.8	-0.5	1.4	0.6	0.2	0.4
Africa	2.2	2.2	2.2	2.1	2.2	2.2	2.3	1.7	1.9	2.2	2.0	2.4	2.3	2.2	2.3	2.3
yoy	0.2	0.0	0.0	-0.1	0.0	0.0	0.2	-0.4	-0.2	0.0	-0.1	0.1	0.6	0.3	0.1	0.3
Asia	25.6	26.4	27.7	28.6	29.5	30.2	29.3	26.8	28.2	29.9	28.6	31.6	30.4	29.3	30.4	30.4
yoy	0.1	0.8	1.3	0.9	0.9	0.7	-1.2	-3.1	-1.8	-0.5	-1.6	2.3	3.6	1.1	0.5	1.9
CIS	7.0	6.9	6.7	6.7	6.7	6.5	6.6	5.6	6.4	6.6	6.3	6.7	6.5	6.9	6.7	6.7
yoy	0.4	-0.1	-0.2	0.0	0.0	-0.1	0.0	-0.6	-0.3	-0.1	-0.2	0.1	0.9	0.4	0.2	0.4
<b>Direct Use</b>	<b>1.2</b>	<b>1.2</b>	<b>1.1</b>	<b>1.1</b>	<b>1.0</b>	<b>1.0</b>	<b>0.9</b>	<b>1.0</b>	<b>1.1</b>	<b>1.0</b>	<b>1.0</b>	<b>0.9</b>	<b>1.0</b>	<b>1.1</b>	<b>1.0</b>	<b>1.0</b>
yoy	-0.1	0.1	-0.2	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Source: IEA, BP, Jodi, Petro-logistics, Rystad Energy, Country Data, Bloomberg, CSM Research