

# Oil outlook survey 2017-2021

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# Oil outlook survey 2017-2021

Survey sent to 5000 recipients on daily best in energy circulation list

Full or partial responses from 1033

Survey conducted between Jan 9 and Jan 11, 2017

Forecast Number of respondents expecting avg. price of Brent in US\$/bbl to be

| Year | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50  | 55  | 60  | 65  | 70  | 75  | 80  | 85 | 90 | 95 | 100 |
|------|---|----|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|----|----|----|-----|
| 2017 | 0 | 0  | 0  | 0  | 1  | 1  | 5  | 19 | 41 | 131 | 330 | 312 | 148 | 29  | 7   | 1   | 2  | 0  | 0  | 1   |
| 2018 | 0 | 0  | 0  | 0  | 0  | 3  | 6  | 19 | 43 | 83  | 134 | 220 | 226 | 159 | 70  | 23  | 13 | 5  | 5  | 2   |
| 2019 | 1 | 0  | 1  | 1  | 3  | 3  | 10 | 21 | 42 | 77  | 78  | 159 | 175 | 168 | 109 | 79  | 34 | 18 | 7  | 10  |
| 2020 | 1 | 1  | 0  | 6  | 4  | 8  | 11 | 24 | 40 | 78  | 61  | 119 | 140 | 150 | 112 | 107 | 41 | 41 | 14 | 19  |
| 2021 | 1 | 0  | 3  | 8  | 7  | 8  | 12 | 31 | 35 | 73  | 58  | 109 | 128 | 142 | 98  | 99  | 54 | 41 | 31 | 24  |

Forecast Number of respondents expecting avg. price of Brent in US\$/bbl to be

| Year | 105 | 110 | 115 | 120 | 125 | 130 | 135 | 140 | 145 | 150 | 155 | 160 | 165 | 170 | 175 | 180 | 185 | 190 | 195 | 200 |
|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 2017 | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   |
| 2018 | 0   | 0   | 1   | 0   | 2   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   |
| 2019 | 0   | 2   | 1   | 0   | 2   | 1   | 1   | 1   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 1   | 0   | 0   | 0   | 1   |
| 2020 | 3   | 7   | 1   | 1   | 0   | 1   | 1   | 1   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 1   | 0   | 0   | 1   |
| 2021 | 2   | 9   | 4   | 3   | 1   | 1   | 0   | 1   | 0   | 2   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 1   |

Dispersion measures (US\$/bbl)

2017 2018 2019 2020 2021

|                    |     |      |      |      |      |
|--------------------|-----|------|------|------|------|
| 5th percentile     | 45  | 45   | 45   | 40   | 40   |
| 10th percentile    | 50  | 50   | 50   | 50   | 45   |
| 25th percentile    | 55  | 55   | 60   | 60   | 60   |
| 75th percentile    | 60  | 70   | 75   | 75   | 80   |
| 90th percentile    | 65  | 75   | 80   | 85   | 90   |
| 95th percentile    | 65  | 77   | 85   | 92   | 95   |
| Standard deviation | 6.7 | 10.4 | 14.8 | 16.9 | 18.4 |

Central tendency (US\$/bbl)

2017 2018 2019 2020 2021

|        |      |      |      |      |      |
|--------|------|------|------|------|------|
| Mode   | 55   | 65   | 65   | 70   | 70   |
| Median | 55   | 60   | 65   | 70   | 70   |
| Mean   | 57.2 | 62.3 | 65.7 | 67.5 | 68.3 |

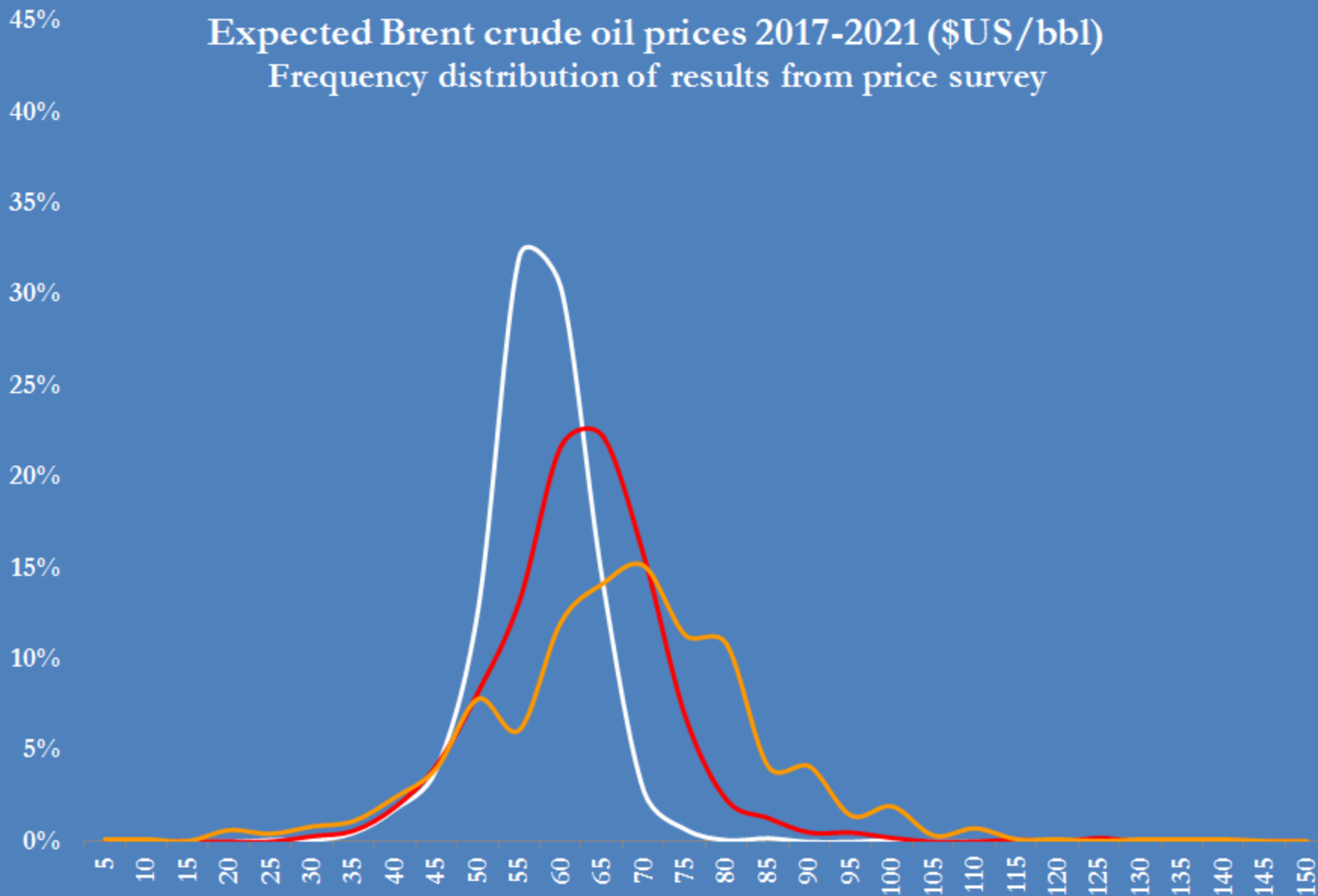
Futures prices (U.S.\$/bbl)

2017 2018 2019 2020 2021

|                            |      |      |      |  |  |
|----------------------------|------|------|------|--|--|
| Fut. strip<br>(9 Jan 2017) | 56.8 | 56.7 | 57.1 |  |  |
|----------------------------|------|------|------|--|--|

# Expected Brent crude oil prices 2017-2021 (\$US/bbl)

## Frequency distribution of results from price survey

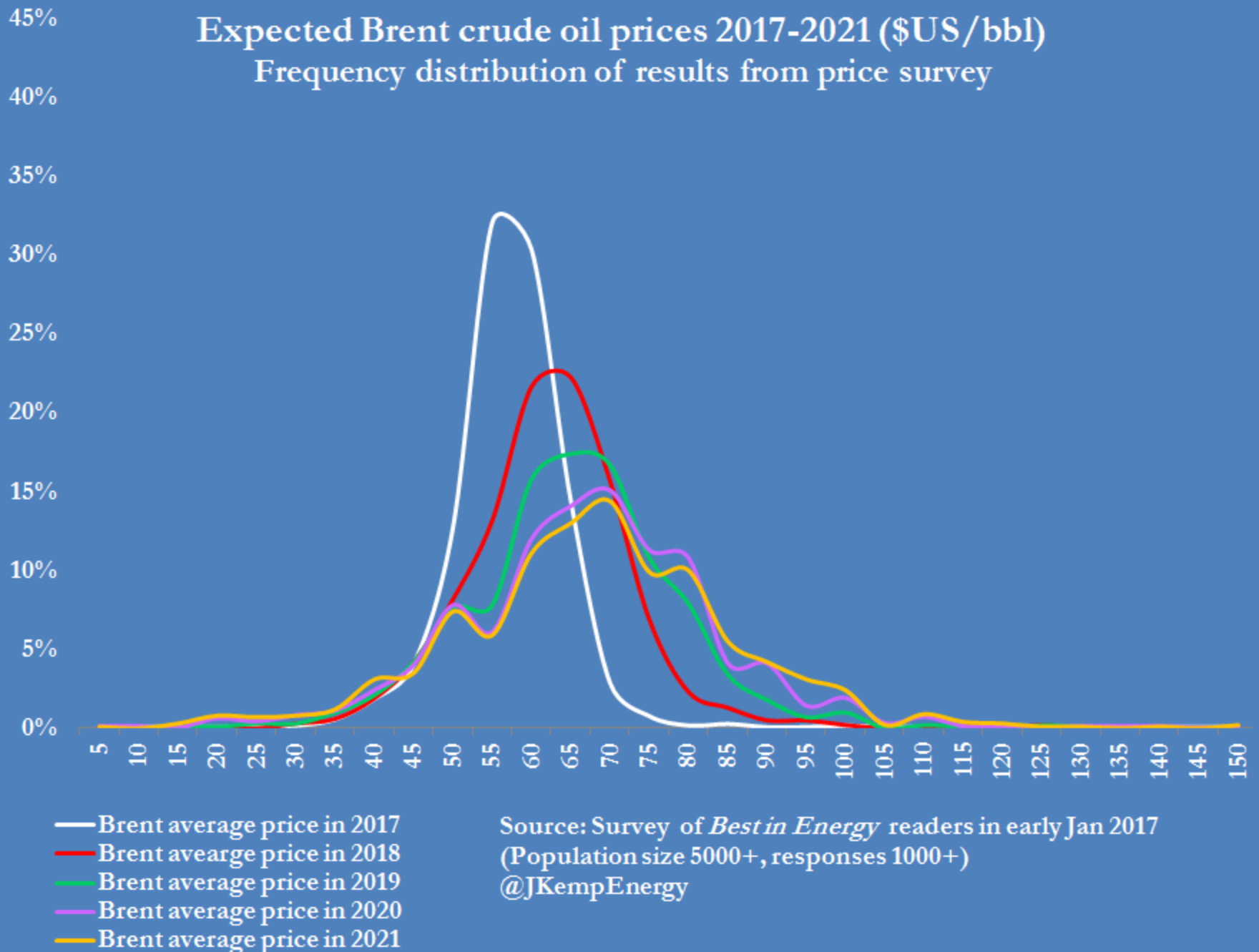


- Brent average price in 2017
- Brent average price in 2018
- Brent average price in 2020

Source: Survey of *Best in Energy* readers in early Jan 2017  
(Population size 5000+, responses 1000+)  
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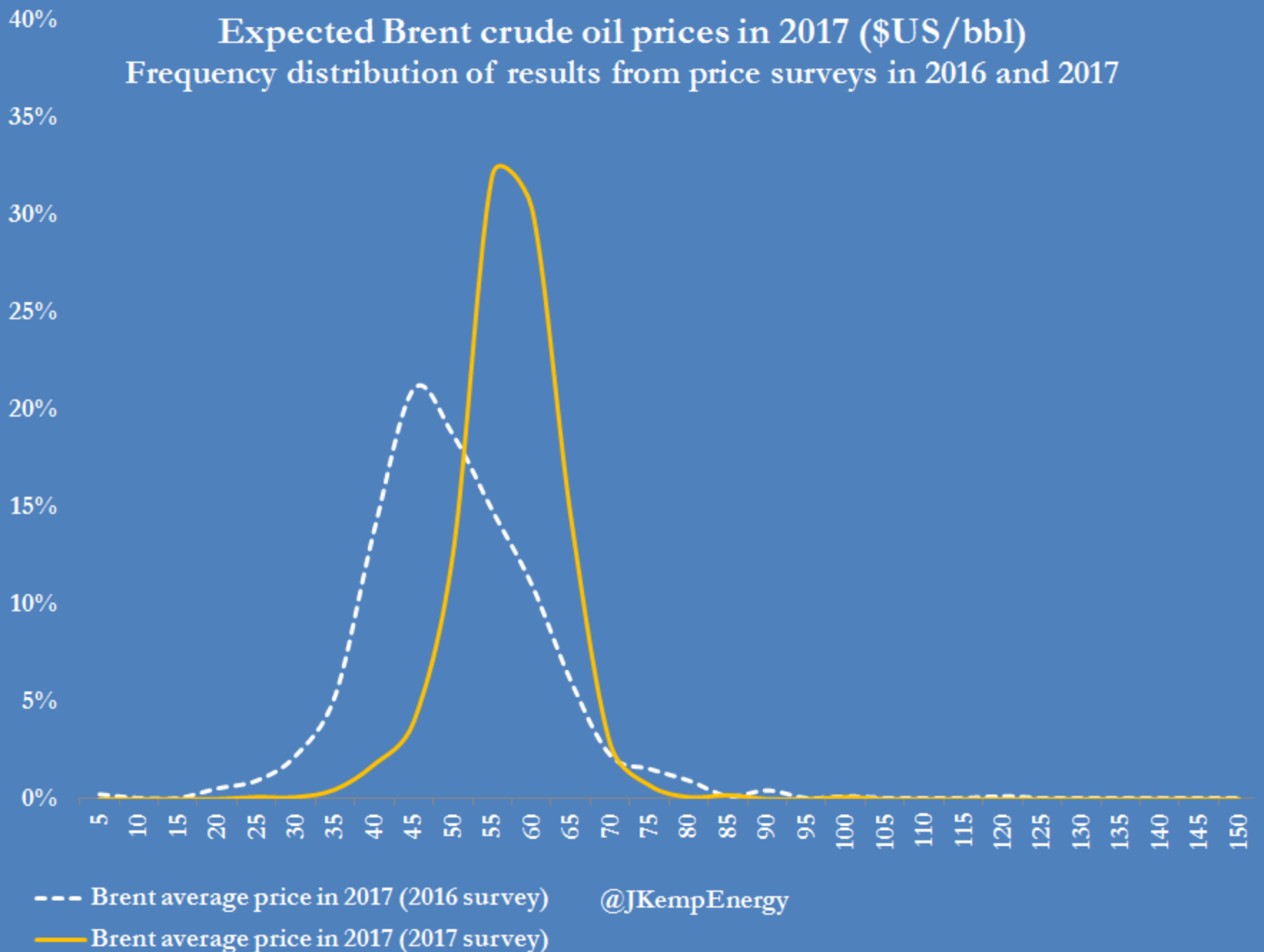
# Expected Brent crude oil prices 2017-2021 (\$US/bbl)

## Frequency distribution of results from price survey



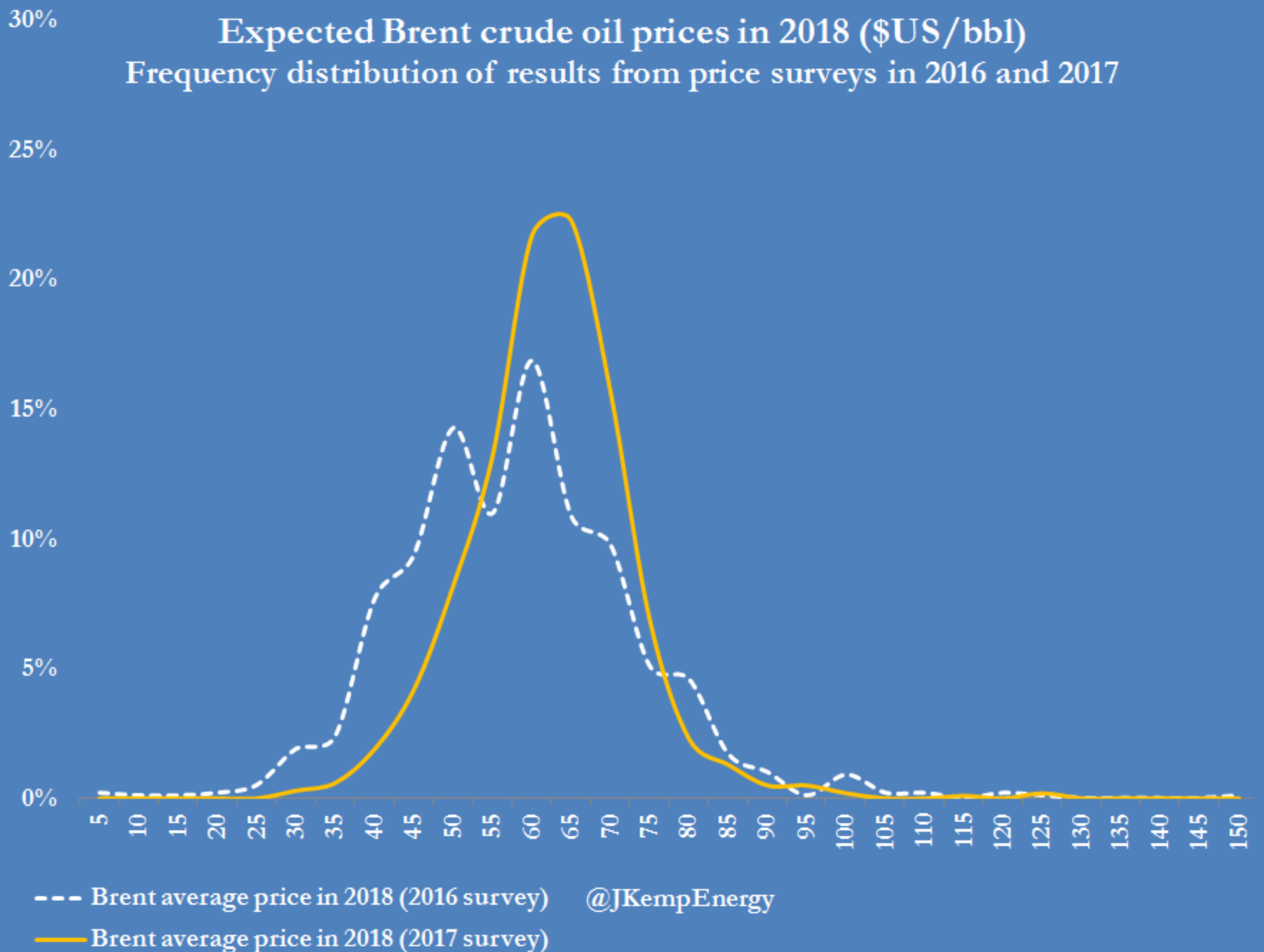
# Expected Brent crude oil prices in 2017 (\$US/bbl)

## Frequency distribution of results from price surveys in 2016 and 2017



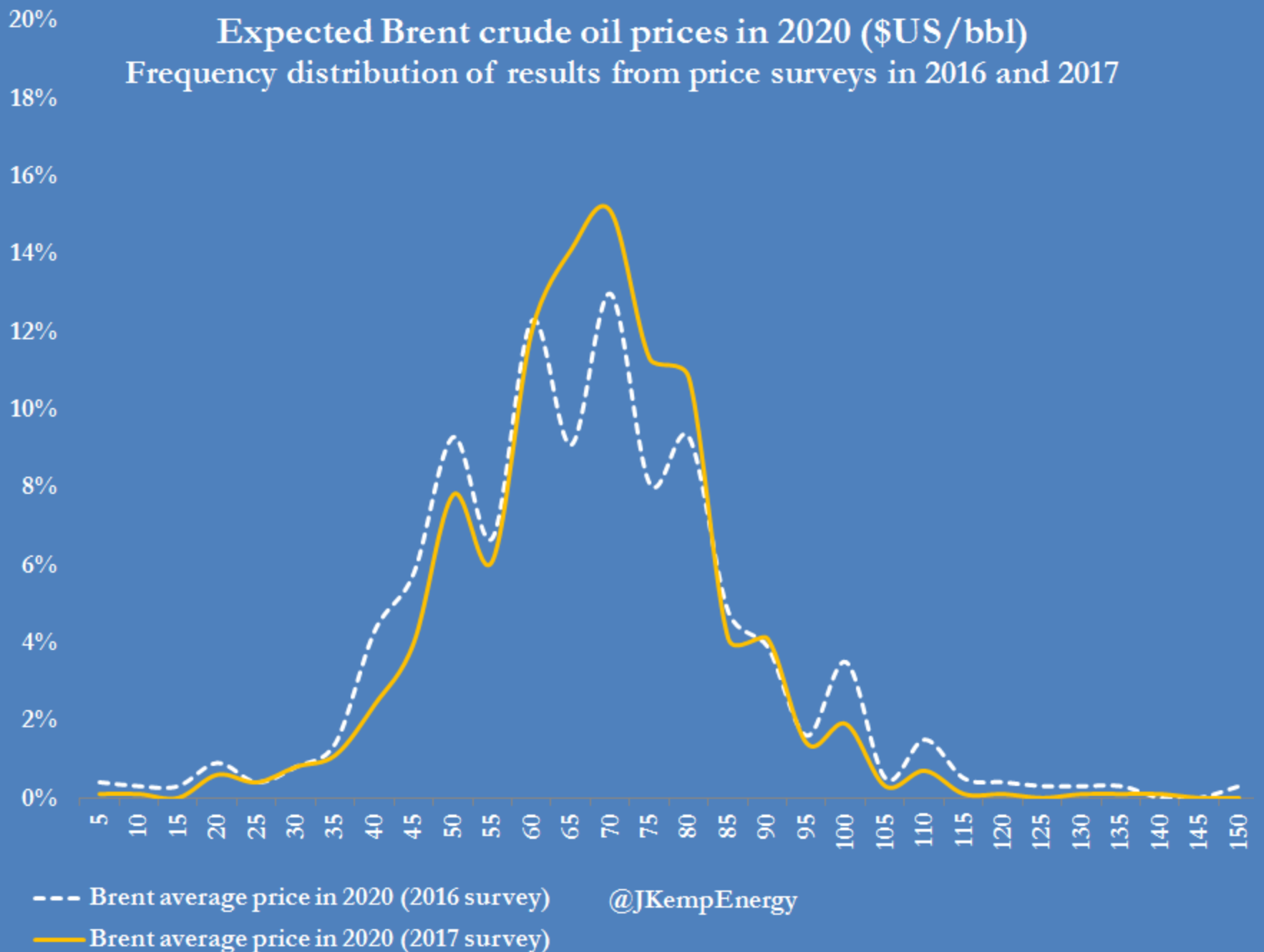
# Expected Brent crude oil prices in 2018 (\$US/bbl)

## Frequency distribution of results from price surveys in 2016 and 2017



# Expected Brent crude oil prices in 2020 (\$US/bbl)

## Frequency distribution of results from price surveys in 2016 and 2017



## Oil outlook survey 2017-2021

### Distribution of survey respondents (1000+)

|                                                                                      |     |
|--------------------------------------------------------------------------------------|-----|
| Oil and gas (exploration, drilling, production, refining, marketing, field services) | 24% |
| Banking and finance                                                                  | 20% |
| Hedge fund                                                                           | 11% |
| Other                                                                                | 9%  |
| Research                                                                             | 8%  |
| Professional services                                                                | 8%  |
| Physical commodity trading                                                           | 7%  |
| Other energy (coal, electricity, gas, carbon markets)                                | 4%  |
| Media                                                                                | 3%  |
| Other corporate (transport, manufacturing, construction, mining, services)           | 3%  |
| Government                                                                           | 2%  |
| Education                                                                            | 2%  |



# Oil outlook survey 2016-2020

Conducted early Mar 2016

Results for comparison

# Oil outlook survey 2016-2020

Survey sent to 2500+ recipients on daily best in energy circulation list

Full or partial responses from 830

Survey conducted between Mar 1 and Mar 6, 2016

| Forecast Year | Number of respondents expecting avg. price of Brent in US\$/bbl to be |    |    |    |    |    |     |     |     |     |     |     |    |     |    |    |    |    |    |     |
|---------------|-----------------------------------------------------------------------|----|----|----|----|----|-----|-----|-----|-----|-----|-----|----|-----|----|----|----|----|----|-----|
|               | 5                                                                     | 10 | 15 | 20 | 25 | 30 | 35  | 40  | 45  | 50  | 55  | 60  | 65 | 70  | 75 | 80 | 85 | 90 | 95 | 100 |
| 2016          | 2                                                                     | 0  | 1  | 3  | 14 | 44 | 202 | 303 | 162 | 63  | 18  | 9   | 1  | 3   | 0  | 0  | 0  | 0  | 0  | 1   |
| 2017          | 2                                                                     | 0  | 0  | 4  | 7  | 18 | 43  | 112 | 170 | 151 | 119 | 89  | 48 | 18  | 12 | 7  | 1  | 3  | 0  | 1   |
| 2018          | 2                                                                     | 1  | 1  | 2  | 4  | 15 | 19  | 62  | 76  | 115 | 89  | 136 | 88 | 79  | 41 | 37 | 14 | 8  | 1  | 7   |
| 2019          | 2                                                                     | 1  | 2  | 3  | 4  | 8  | 22  | 34  | 54  | 95  | 65  | 110 | 93 | 103 | 55 | 63 | 26 | 24 | 9  | 16  |
| 2020          | 3                                                                     | 2  | 2  | 7  | 3  | 6  | 11  | 34  | 46  | 74  | 53  | 98  | 72 | 103 | 64 | 74 | 38 | 31 | 13 | 28  |

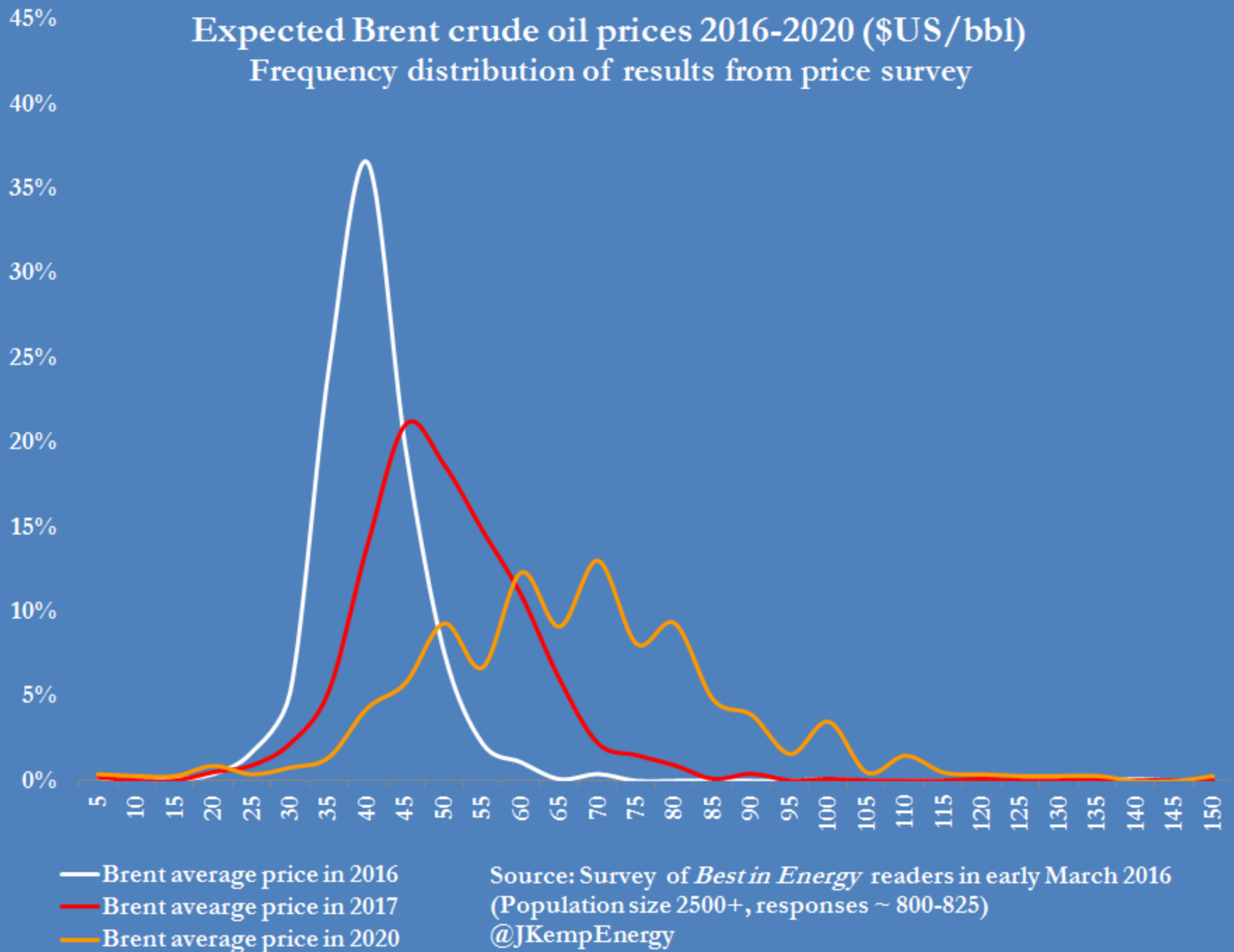
| Forecast Year | Number of respondents expecting avg. price of Brent in US\$/bbl to be |     |     |     |     |     |     |     |     |     |     |     | Response rate  |             |
|---------------|-----------------------------------------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------------|-------------|
|               | 105                                                                   | 110 | 115 | 120 | 125 | 130 | 135 | 140 | 145 | 150 | 155 | 160 | Total Response | No Response |
| 2016          | 0                                                                     | 0   | 0   | 0   | 0   | 0   | 0   | 1   | 0   | 0   | 0   | 0   | 827            | 3           |
| 2017          | 0                                                                     | 0   | 0   | 1   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 806            | 24          |
| 2018          | 2                                                                     | 2   | 0   | 2   | 1   | 0   | 0   | 0   | 0   | 1   | 1   | 0   | 806            | 24          |
| 2019          | 3                                                                     | 2   | 1   | 4   | 0   | 1   | 0   | 1   | 0   | 1   | 0   | 0   | 802            | 28          |
| 2020          | 4                                                                     | 12  | 4   | 3   | 2   | 2   | 2   | 0   | 0   | 2   | 0   | 1   | 794            | 36          |

|                    | Dispersion measures (US\$/bbl) |      |      |      |      |                            | Central tendency (US\$/bbl) |      |      |      |      |
|--------------------|--------------------------------|------|------|------|------|----------------------------|-----------------------------|------|------|------|------|
|                    | 2016                           | 2017 | 2018 | 2019 | 2020 |                            | 2016                        | 2017 | 2018 | 2019 | 2020 |
| 5th percentile     | 30                             | 35   | 35   | 35   | 40   | Mode                       | 40                          | 45   | 60   | 60   | 70   |
| 10th percentile    | 35                             | 40   | 40   | 45   | 45   | Median                     | 40                          | 50   | 60   | 65   | 65   |
| 25th percentile    | 35                             | 45   | 50   | 50   | 55   | Mean                       | 40.4                        | 50   | 58.4 | 63.3 | 67   |
| 75th percentile    | 45                             | 55   | 65   | 75   | 80   |                            |                             |      |      |      |      |
| 90th percentile    | 50                             | 65   | 75   | 85   | 90   |                            |                             |      |      |      |      |
| 95th percentile    | 50                             | 70   | 80   | 90   | 100  |                            |                             |      |      |      |      |
| Standard deviation | 7.9                            | 11.2 | 15.7 | 17.4 | 20.2 | Fut. strip<br>(1 Mar 2016) | 43.9                        | 46.6 | 48.5 | 50.2 |      |

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# Expected Brent crude oil prices 2016-2020 (\$US/bbl)

## Frequency distribution of results from price survey



# Expected Brent crude oil prices 2016-2020 (\$US/bbl)

## Frequency distribution of results from price survey

