

Energy Efficiency Trends Vol. 23

Essential insight for
consumers and suppliers
of non-domestic energy
efficiency in the U.K.

June 13, 2018



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Section 1. Introduction

Welcome to the latest edition of U.K. *Energy Efficiency Trends* (Vol.23), the leading source of market insight for the energy efficiency sector.

It's fair to say that it hasn't been the most comfortable six months for the sector. In Vol. 22 we reported a pretty dour set of results and this quarter feels largely the same. Confidence remains very low, not least because of a slow-down in customer orders being placed and a dip in the value of those orders that have been. Unfortunately – and it almost goes without saying at this point – the uncertainty precipitated by Brexit is a further factor. The sector's negative feedback towards government's performance expresses a deep sense of industry frustration.

A finding to focus on from the customer side of the research is investment payback expectations. This has relaxed a touch this quarter to around five years (from a long-term four-year average). Project economics is always something to keep an eye on, and if Brexit-related inflationary pressures hit, and 'low hanging fruit' become increasingly difficult to find, we might expect investment paybacks to extend in future quarters.

Now to some positive news this quarter...in terms of technology being deployed, we saw a notable jump in the 'smart building' cohort of investments – building energy management systems, lighting controls, monitoring software and smart metering. A well-publicised group to keep an eye on; and perhaps a future growth trend in the making?

And finally, despite all the above, the supply side of the sector remains resolutely optimistic about future prospects. Emblematic of this is the expectation for a surge of orders to land over the next three months! We will wait and see (with fingers crossed).



Tom Rowlands-Rees
Bloomberg New Energy
Finance



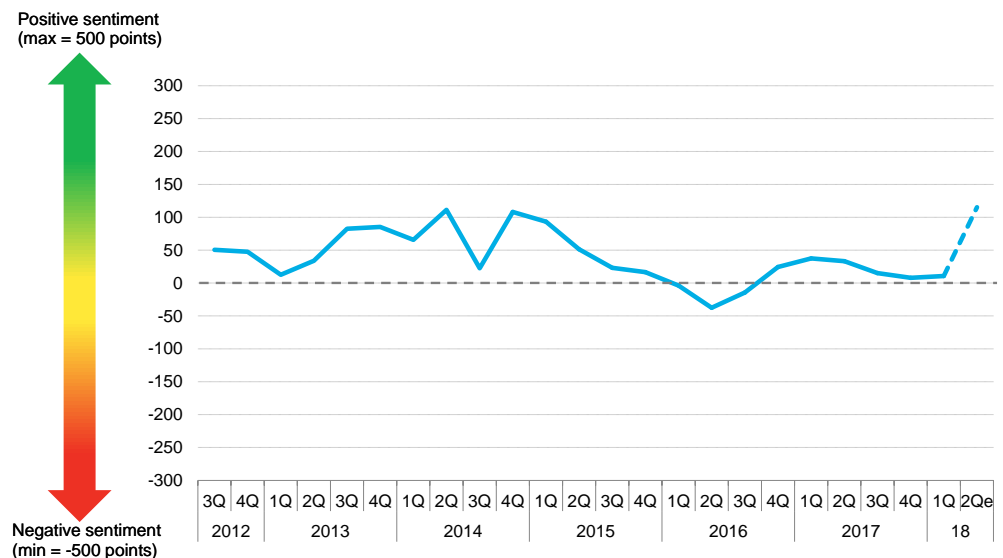
Ian Jeffries
EEVS Insight

Section 2. Executive Summary

The EEVS/Bloomberg *Energy Efficiency Trends* Survey (Vol.23) was completed by 68 U.K.-based respondents (35 consumer organizations and 33 suppliers), between April 18 and May 18, 2018. Their answers relate to the situation in the first quarter of 2018.

2.1. Supplier trends

Figure 1: Market Monitor – tracking industry confidence



Source: EEVS, BNEF. Note: based on weighted confidence indicators from Figures 3, 4, 5, 6, and 9. Zero represents neutrality.

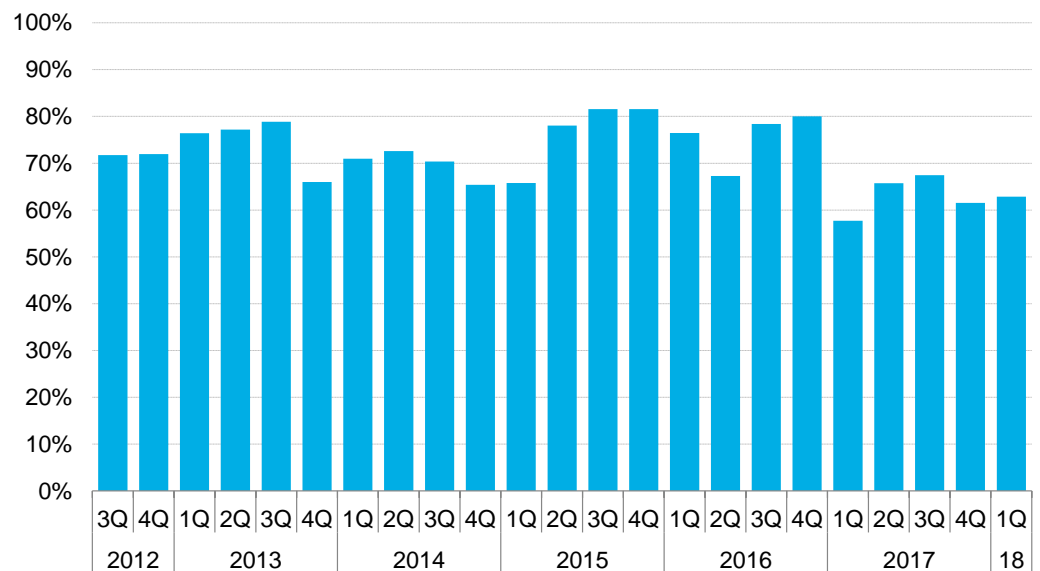
- **Overall Confidence** – an earlier recovery has failed to hold over the last 18 months and (as set out in Figure 1 above) confidence has been on a downward trajectory for the last three quarters. Despite this downbeat result, suppliers were significantly more upbeat about the outlook for next three months. Figure 1 shows a significant spike in confidence in relation to activity in 2Q of this year (perhaps in anticipation of receiving approval for projects that, until now, have not been given the go-ahead)
- **Orderbooks** – this quarter saw a continuation of the downward slide in reported orders over the last 12 months. Figure 3 shows that 58% of suppliers saw either stable or falling orders this quarter. The finding was further supported by our consumers' feedback with Figure 2 (overleaf) showing a material drop off in projects being commissioned. Interestingly, however, suppliers do forecast a more positive outlook – 76% reported an expected uptick in orders in the second quarter of 2018.
- **Staffing & Prices** – Figure 5 shows that despite the trend towards a tightening of sales volumes, suppliers have not reported reductions in staffing levels over the last six months,

which has steadily increased over the period. Similarly, pricing levels have also edged up over the last 12-month period.

- **Government action** – suppliers were unequivocal in their feedback on government performance this quarter. Strongly negative feedback has continued for 12 months with more than 8 out of 10 suppliers now considering government action on energy efficiency to be either 'neutral' or 'ineffective'. Likewise, in relation to the government's management of the wider U.K. economy only 1 in 10 suppliers currently consider it to be 'effective'.

2.2. Consumer trends

Figure 2: Consumers commissioning efficiency projects



Source: EEVS, BNEF. Note: shows the proportion of respondents who have commissioned (or plan to commission) projects in a given quarter.

- **Procurement** – whilst Figure 2 (above) shows six out of 10 consumers reported energy efficiency purchases this quarter, it also shows a notable step down in the volume of procurement over the last year – a trend that has continued into 1Q 2018.
- **Technologies** – whilst lighting upgrades continue to occupy the top spot by some margin, there were noteworthy gains for 'smart building' technologies. BEMS (Building Energy Management Systems) was a standout overperformer, with volumes significantly in excess of typical levels. Lighting controls, smart metering, monitoring and targeting software also saw material gains this quarter.
- **Capital Spending** – a good mix of project values continue to be reported, with the largest spending band (£500k+) attracting the most responses and representing some 27% of reported projects. However, at the same time, there has been a squeeze on mid-size projects; with a shift to lower value investments (in the £50-£100k band) from the £100-500k band (see Figure 15 for further details).
- **Expected Payback** – this quarter saw a material uptick in projects reporting payback periods in the 5-10 year banding. Alongside this, customers also reported a reduction in shorter 1-3



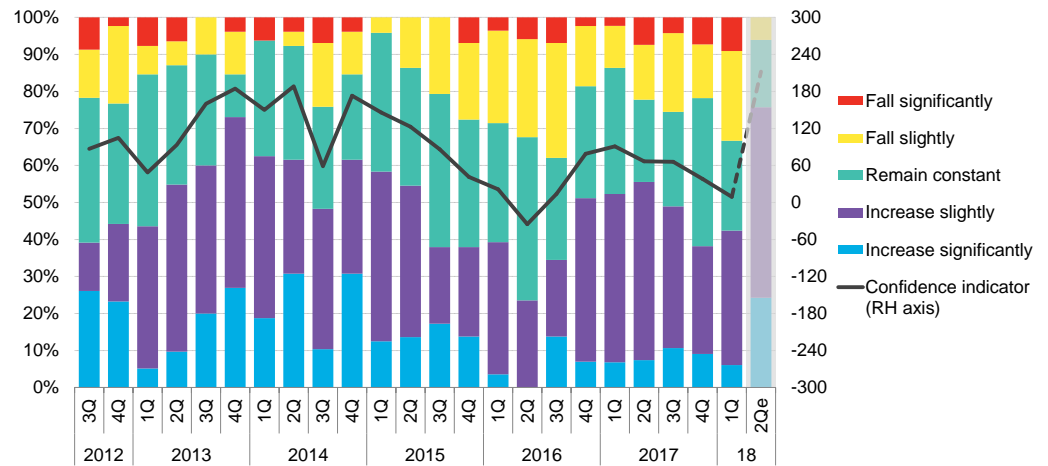
year payback projects. This shift has pushed the median payback expectation towards the 5-year level.

- **Performance Measurement / Verification** – a strong set of results this quarter with 55% customers reporting that their projects included robust performance measurement / savings verification processes. As the market has matured, it is also noteworthy that this quarter only 5% of respondents answered that they didn't know if investment performance was being measured (compared to more than 40% when the survey began in 2012).

Section 3. Supplier trends

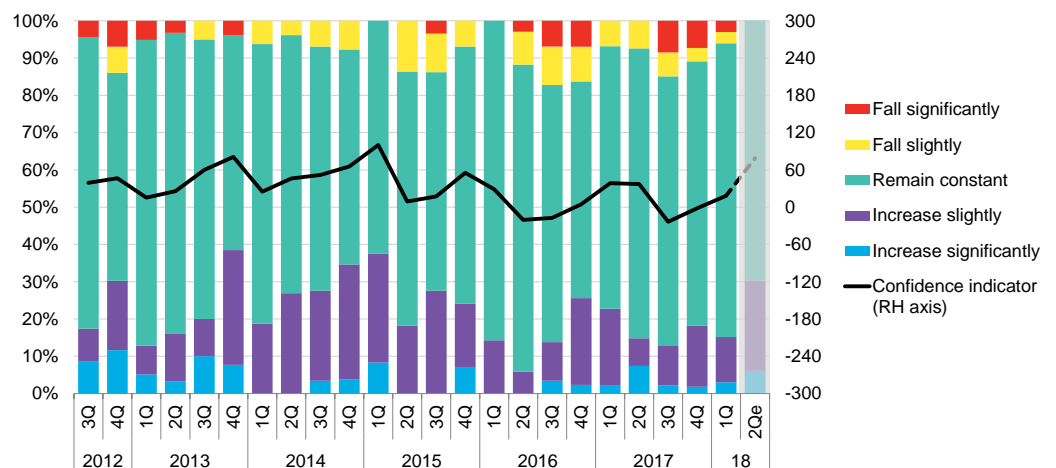
3.1. The order book

Figure 3: Trends in orders from national customers



Source: EEVS, BNEF. Note: the confidence indicator is an input to the market monitor in Figure 1. Zero represents neutrality.

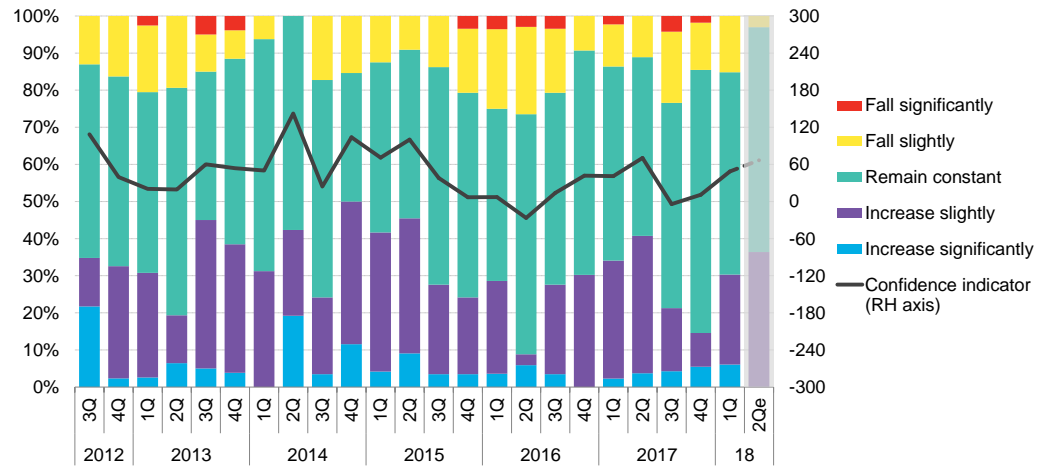
Figure 4: Trends in orders from overseas customers



Source: EEVS, BNEF. Note: the confidence indicator is an input to the market monitor in Figure 1. Zero represents neutrality.

3.2. Staff numbers

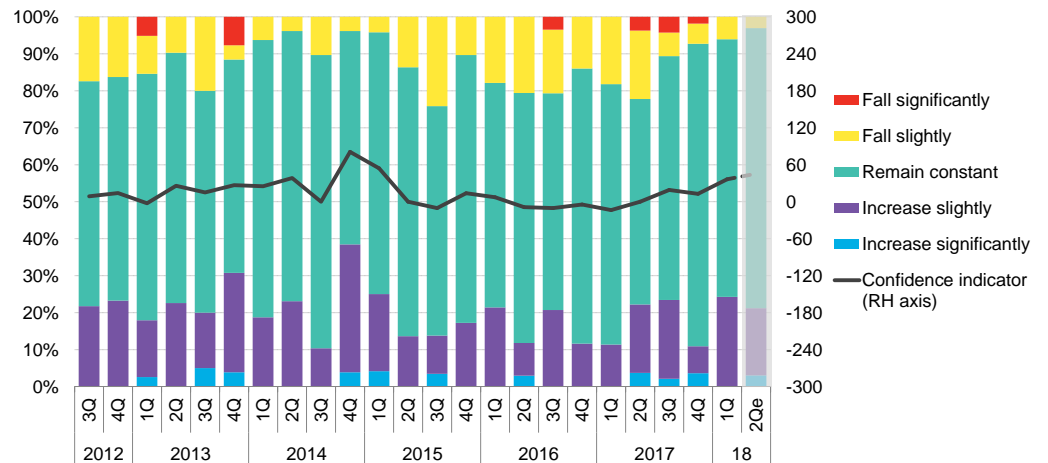
Figure 5: Trends in the number of staff employed



Source: EEVS, BNEF. Note: the confidence indicator is an input to the market monitor in Figure 1. Zero represents neutrality.

3.3. Sale prices

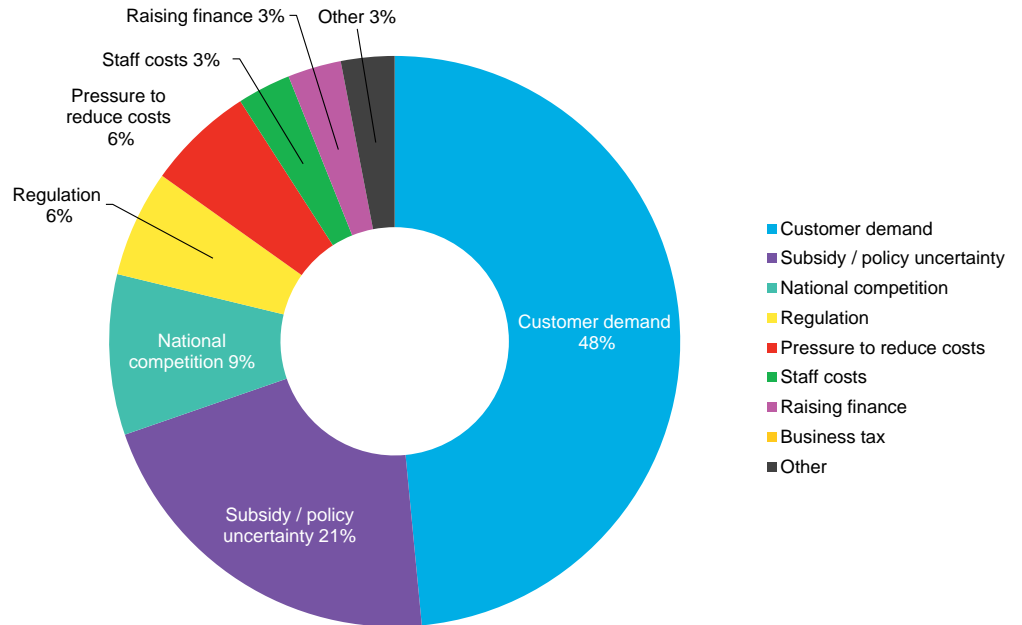
Figure 6: Trends in sale prices achieved



Source: EEVS, BNEF. Note: the confidence indicator is an input to the market monitor in Figure 1. Zero represents neutrality.

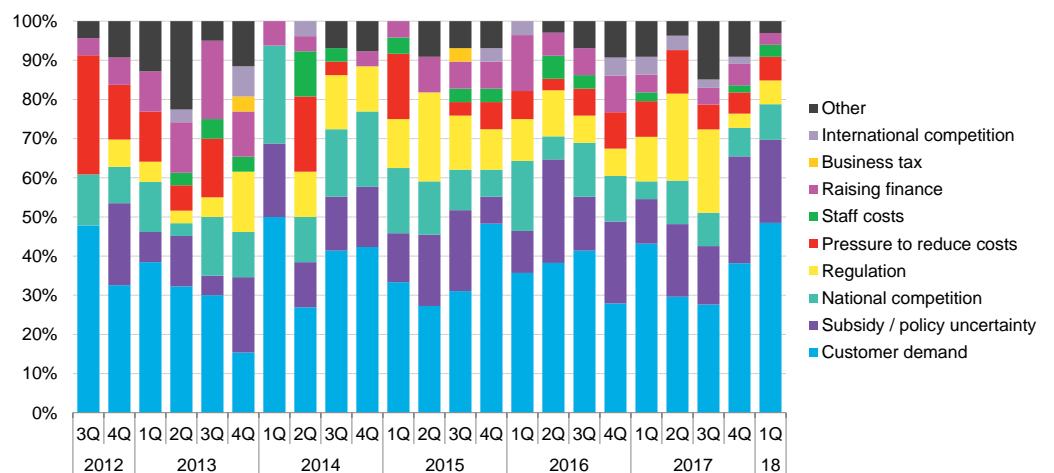
3.4. Industry risk

Figure 7: Key issues of concern to energy-efficiency suppliers, 1Q 2018



Source: EEVS, BNEF. Note: each supplier respondent was asked to select their primary issue of concern.

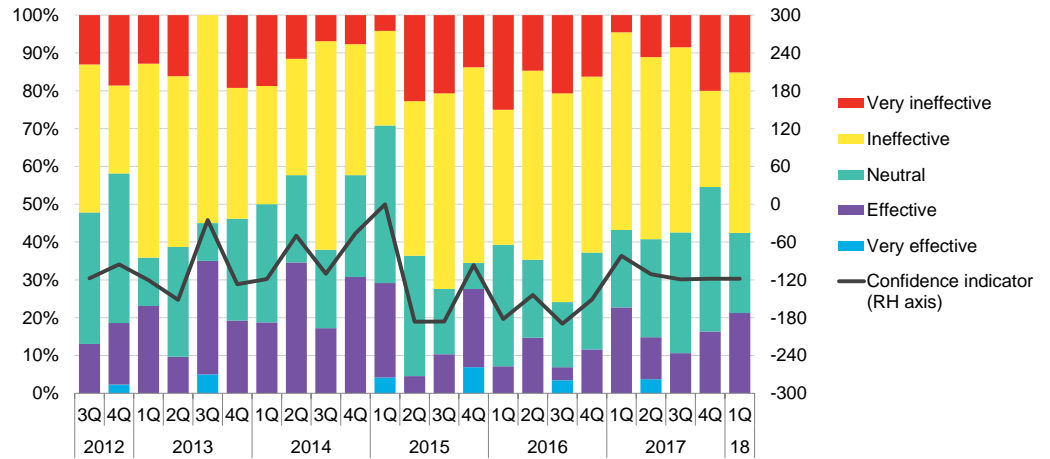
Figure 8: Trends in key issues of concern



Source: EEVS, BNEF. Note: each supplier respondent was asked to select their primary issue of concern.

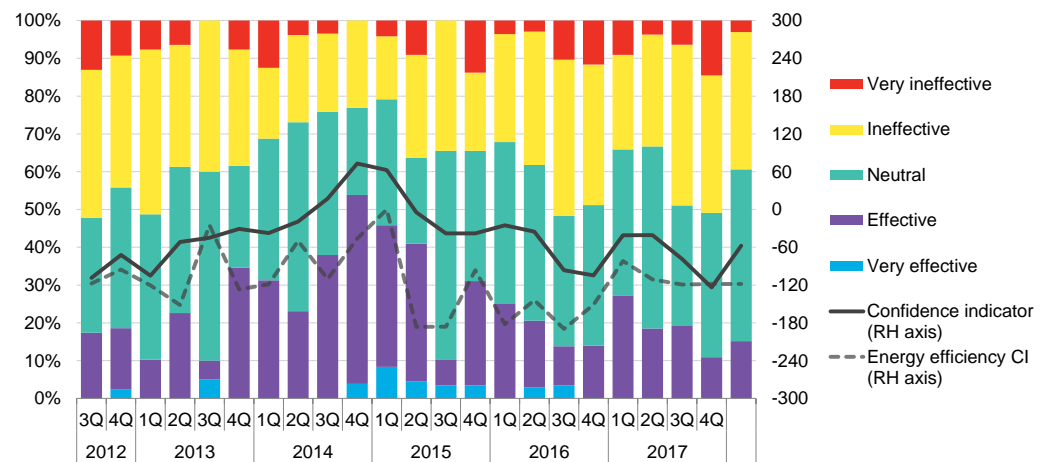
3.5. Government Effectiveness

Figure 9: Trends in industry views on energy efficiency policy



Source: EEVS, BNEF. Note: the confidence indicator is an input to the market monitor in Figure 1. Zero represents neutrality.

Figure 10: Trends in industry views of the wider economy's management

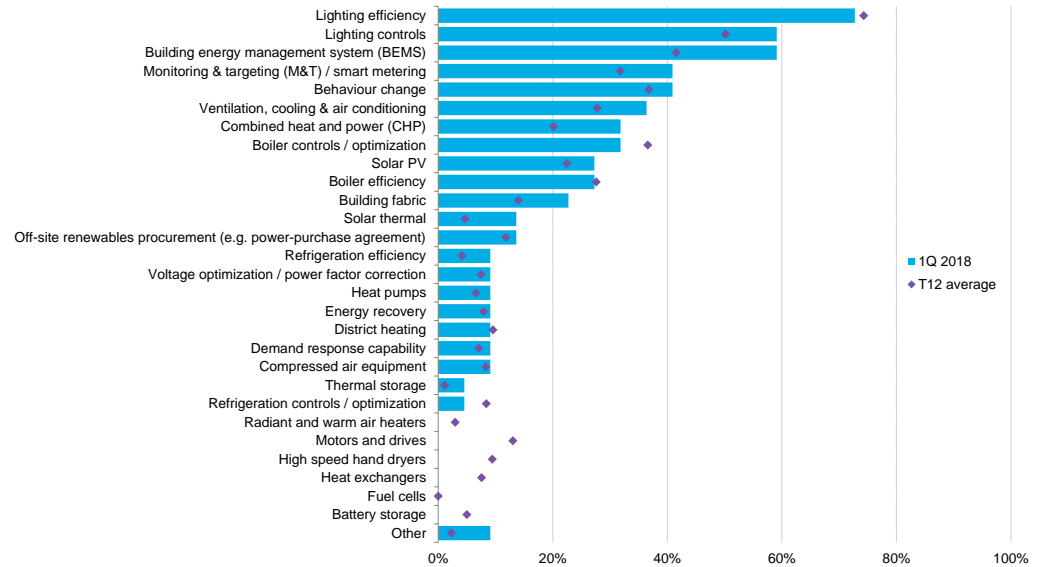


Source: EEVS, BNEF. Note: CI = confidence indicator. The dotted line represents the CI from Figure 9, which is overlaid here for comparison with views on the wider economy. Zero represents neutrality.

Section 4. Consumer Trends

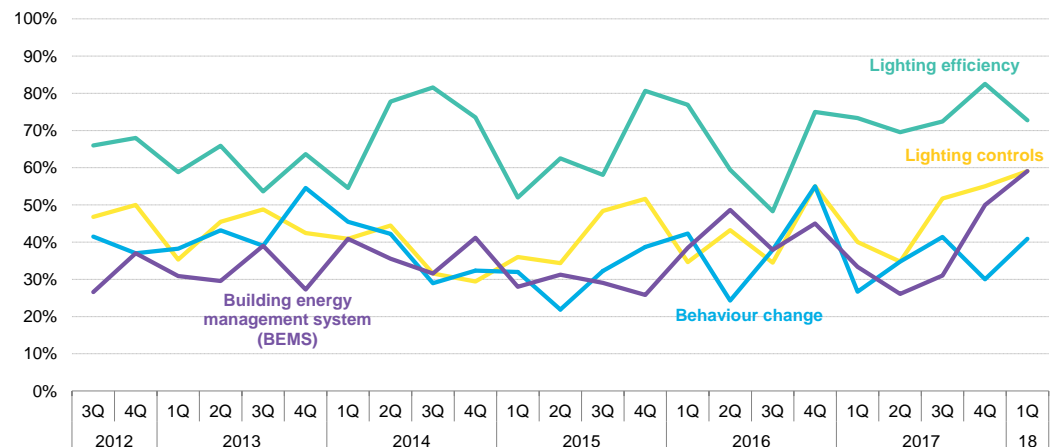
4.1. Technologies and measures

Figure 11: Uptake of energy efficiency technologies, 1Q 2018 versus four-quarter average



Source: EEVS, BNEF. Note: ranks technologies according to the proportion of consumers who commissioned a project in each technology out of the overall number of consumers commissioning projects.

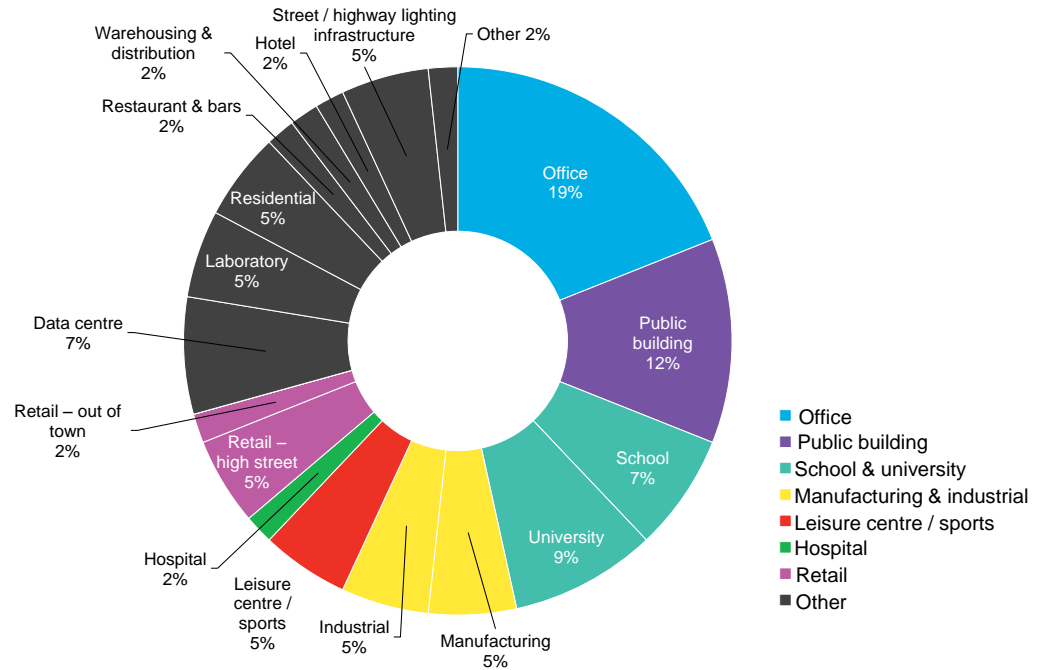
Figure 12: Trends in top technologies for consumer uptake



Source: EEVS, BNEF. Note: shows the proportion of respondents who commissioned a project in the respective category out of the total number of respondents who commissioned a project.

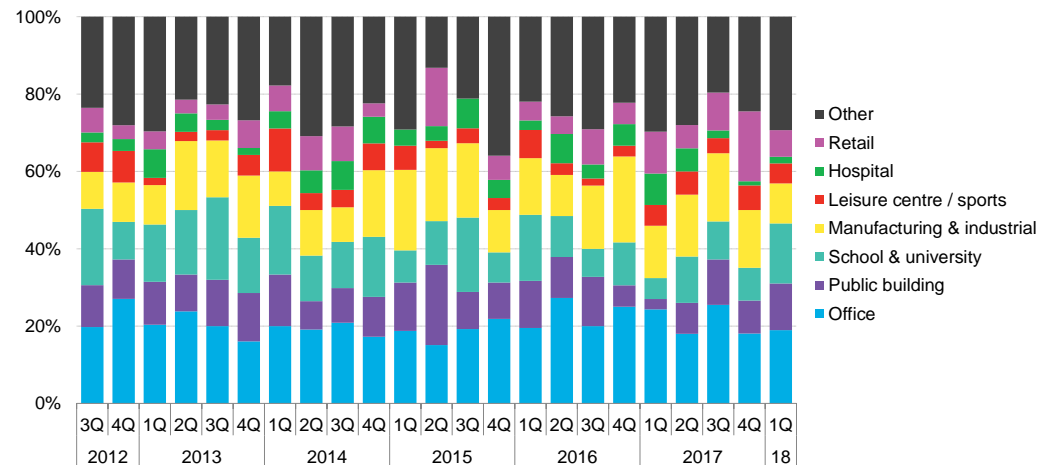
4.2. Property types

Figure 13: Breakdown of commissioned projects by property type, 1Q 2018



Source: EEVS, BNEF

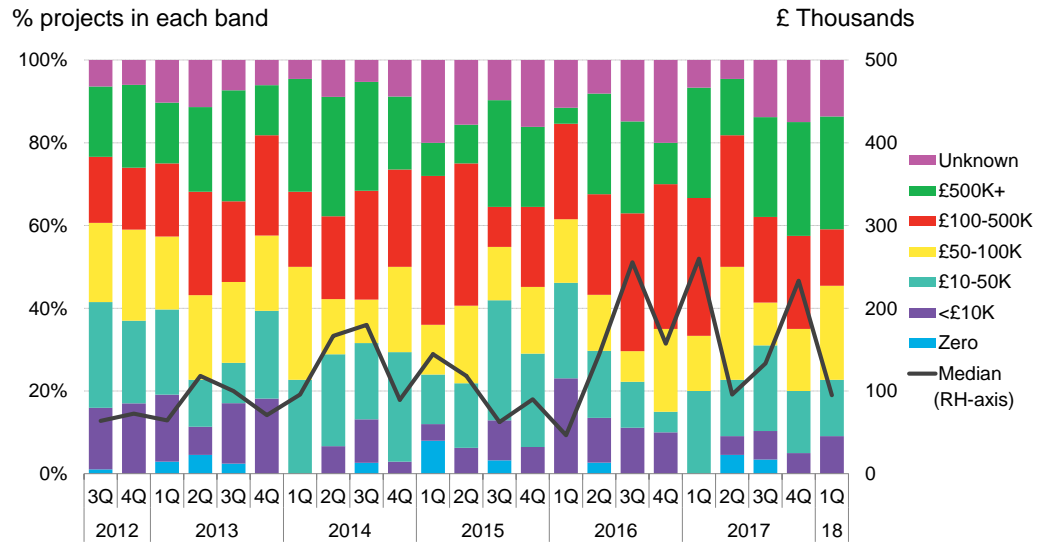
Figure 14: Trends of commissioned projects by property type



Source: EEVS, BNEF

4.3. Project costs

Figure 15: Trends in capital costs



Source: EEVS, BNEF. Note: the line shows the cost trend for energy efficiency projects over time based on the estimated median.

4.4. Project finance

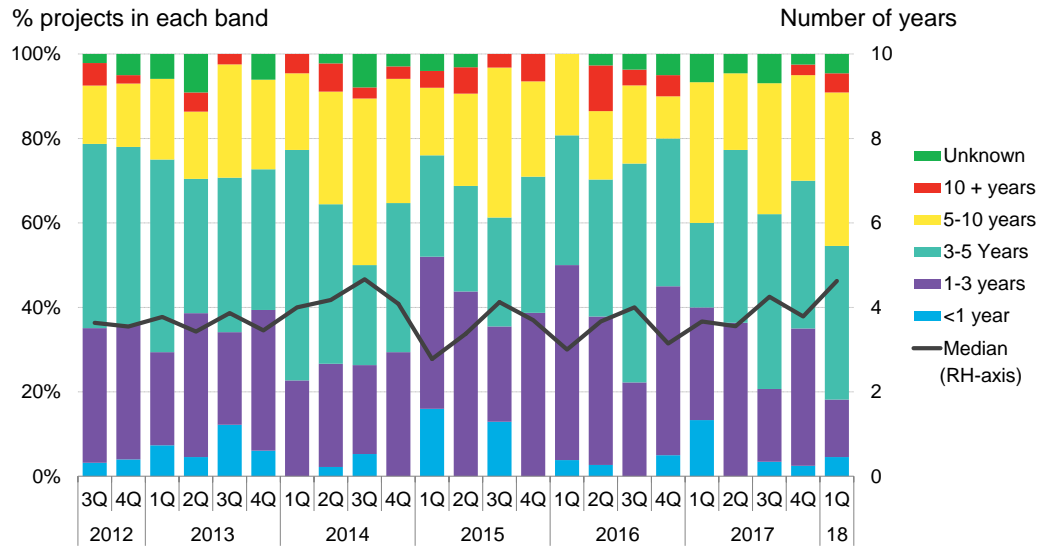
Figure 16: Trends in finance models



Source: EEVS, BNEF

4.5. Financial payback

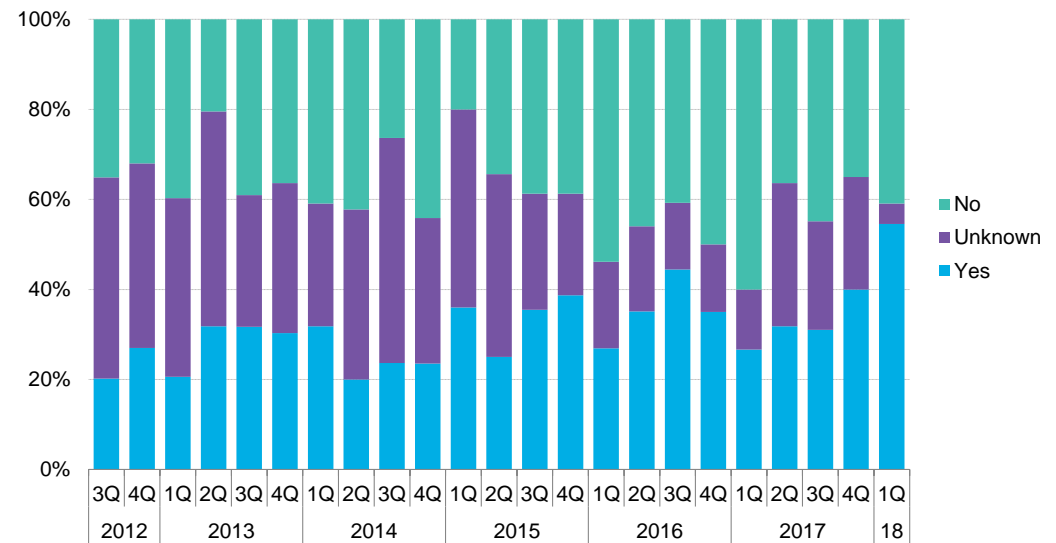
Figure 17: Trends in expected payback periods



Source: EEVS, BNEF. Note: the line shows the expected payback trend for energy efficiency projects based on the estimated median.

4.6. Measurement and verification

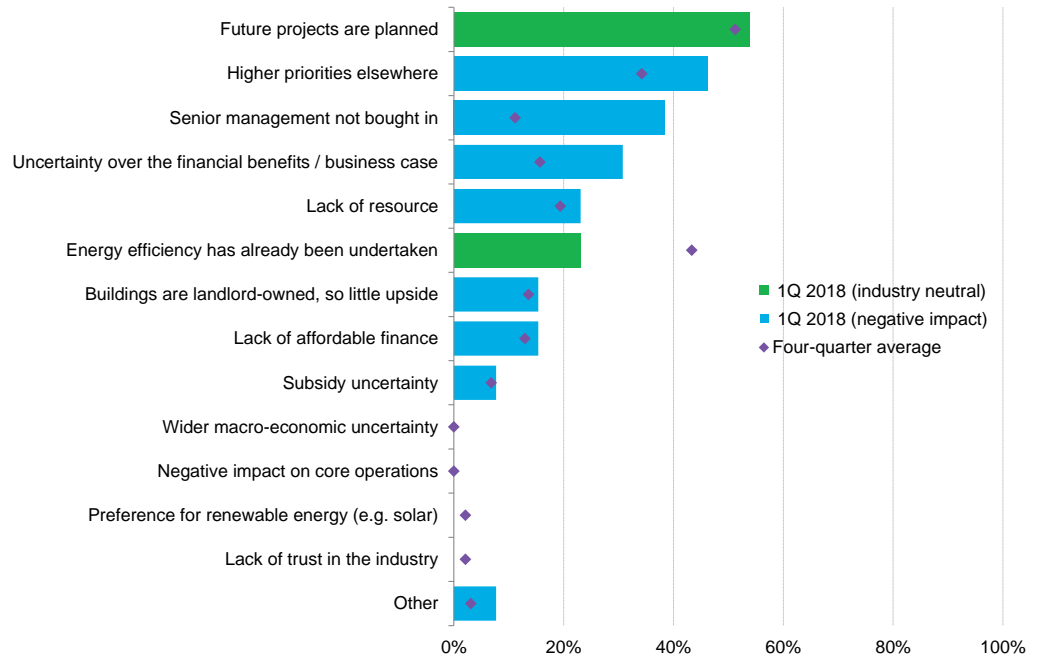
Figure 18: Trends in the use of good practice M&V



Source: EEVS, BNEF. Note: M&V = measurement and verification.

4.7. Consumers not undertaking energy efficiency

Figure 19: Consumer reasons for lack of efficiency uptake, 1Q 2018 versus four-quarter average



Source: EEVS, BNEF. Note: respondents not commissioning projects may have cited multiple reasons. The chart shows the proportion of respondents in each category out of overall respondents not commissioning projects. Results therefore do not sum to 100%.

Appendices

Appendix A: Methodology

The EEVS/Bloomberg *Energy Efficiency Trends* Survey (Vol.23) was conducted between April 18 and May 18, 2018, and completed by 68 U.K.-based respondents (35 consumer organizations and 33 suppliers).

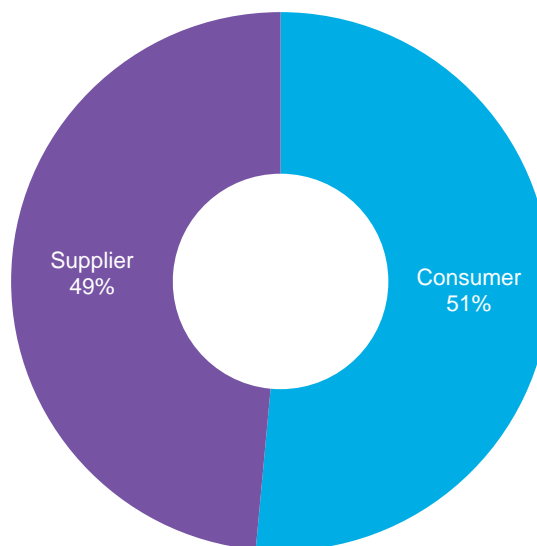
This is the 23rd in a series of reports showing industry trends in non-residential energy efficiency. As the report series evolves, we continue to make minor tweaks.

Initially, the report covered a broad range of European countries, but since Volume 8, it has presented U.K.-based results only, as these consistently accounted for the bulk of data received.

In focusing the report on a single country with better data coverage, we were able to present cleaner, more robust results. This coincided with a revamp of the analysis including – among other modifications – the introduction of a set of time series charts.

Please reach out should you wish to discuss any of the trends observed in the charts.

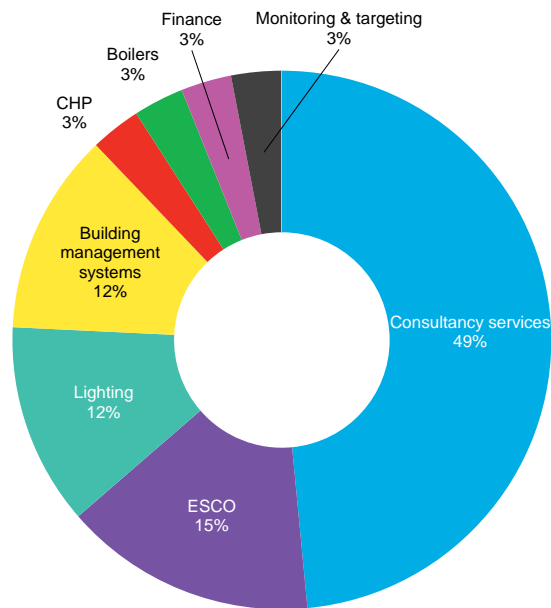
Figure 20: Who completed the survey?



Source: EEVS, BNEF

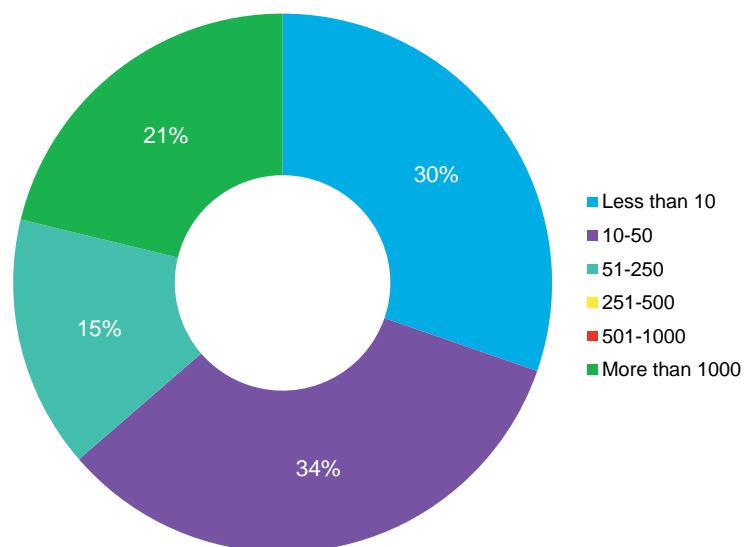
Appendix B: Supplier respondents

Figure 21: Breakdown of respondents by supplier type, 1Q 2018



Source: EEVS, BNEF

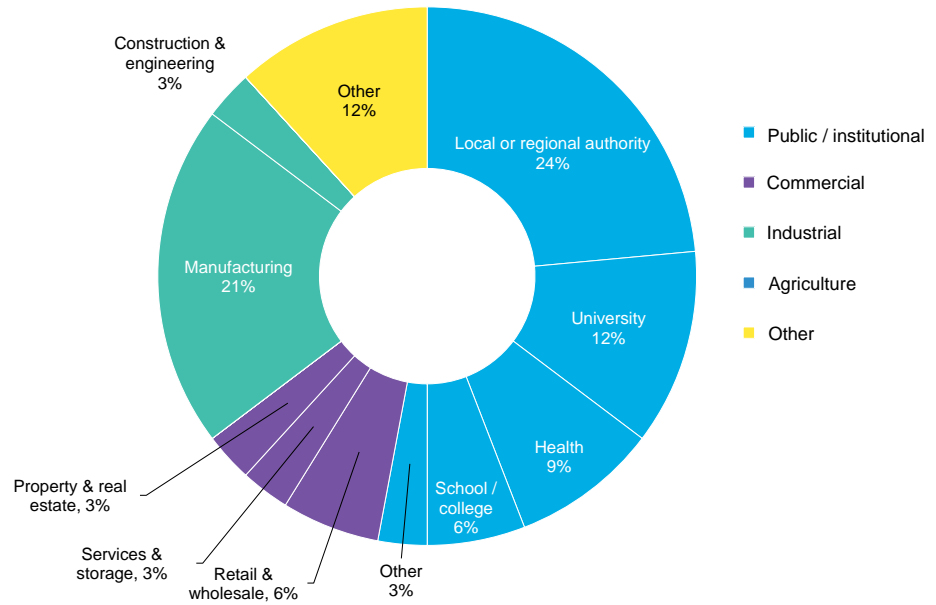
Figure 22: Supplier respondents' organization size (no. of employees), 1Q 2018



Source: EEVS, BNEF

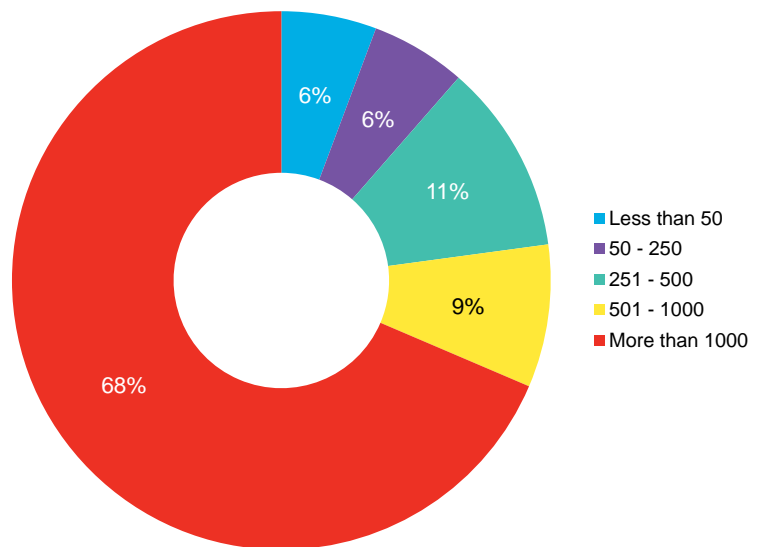
Appendix C: Consumer respondents

Figure 23: Consumer respondents by sector, 1Q 2018



Source: EEVS, BNEF

Figure 24: Consumer respondents' organization size (no. of employees), 1Q 2018



Source: EEVS, BNEF

About US

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