



# Empirical Analysis of the German Market for Energy Services

Summary of the results of the 2017 energy services market survey

#### Reference:

Bundesstelle für Energieeffizienz (BfEE) (ed.), "Empirische Untersuchung des Marktes für Energiedienstleistungen, Energieaudits und andere Energieeffizienzmaßnahmen", Endbericht BfEE 04/17, Eschborn, 2018

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## **Table of Contents**

1	Purpose	1
2	Methodology	
3	Market Overview	3
	3.1 Market Volume	3
	3.2 Future Market Development	4
4	Energy Analysis and Advice	5
5	Energy Contracting	7
6	Energy Management	10
7	Market Environment & Marketing	13
	7.1 Market Facilitation and Promotion	13
	7.2 Information channels	15
8	Conclusions	16

## 1 Purpose

A functioning market for energy services (ES) and energy efficiency is an essential requirement for the success of the energy transition and the attainment of the ambitious climate protection objectives of the German national government. The energy services, as well as the characteristics of demand for energy services and the framework conditions for market evolvement are subject to continuous development. According to the German Energy Services Act, Section 9, paragraph 2, number 5, the German Federal Centre for Energy Efficiency (Bundesstelle für Energieeffizienz, BfEE) is, among other things, responsible for monitoring and evaluating the market for energy services, energy audits and other energy-efficiency measures and for preparing suggestions for their further development.

The empirical study published in early 2018 is based on an analysis from 2013 and, for the second time in a row, describes the market based on a large-n survey. Germany has a highly developed market for energy services. The product range is wide and particularly difficult to describe due to its dynamic adaptation to customer needs and conditions. The market survey is aimed at services which, at their core, concern energy or energy efficiency. This means that, e.g. general planning- and trade services are not observed, even though they might influence the total final energy consumption. The services vary from simple free-of-charge *Online-checks* for information purposes to complex product bundles covering far-reaching technical- and commercial risks (e.g. energy performance contracting).

This study of the ES-market by the BfEE understands the market to consist of the segments information, advice, management services and contracting. It illustrates current developments. It was possible to create transparency in the supply- and demand-side structures, and to create reliable estimates of prices, costs and availability of the energy services supply. Furthermore, market barriers and motives for the usage of energy services are shown.

For the current market study, the concept - which is based on comprehensive surveys of both the supply and demand side - was optimised and refined. Improvements include the consistent and uniform wording of the questionnaires for all supplier surveys - both online and via telephone. In addition, this study - to a larger degree - addresses selected groups such as utilities and market facilitators.

According to the current 2017 survey, the energy services market has grown in comparison to the 2016 survey. The number of providers in almost all sub-segments has increased, and the number of the provided services has also in general increased. However, a closer look at individual services shows a clear divergence regarding the use and spread of energy services which is partially due to methodological improvements.

The following pages summarize the key results of the 2017 market survey. Detailed analyses, as well as definitions and background information are presented in the study "Empirische Untersuchung des Marktes für Energiedienstleistungen, Energieaudits und andere Energieeffizienzmaßnahmen, Endbericht BfEE 04/2017" (BfEE, 2018) in German language.

# 2 Methodology

The objective of the study was the observation and the evaluation of the energy services market. For this purpose, an indicator-based survey concept was developed, in the scope of which information concerning the following subordinate topics is to be collected:

- Standardized, over time comparable market indicators for all relevant products (market monitoring)
- Supplier and consumer motivations, barriers and information pathways as well as expectations regarding the market development.

These objectives were each allocated with different indicators collected in the course of the study (see Figure 1).

Figure 1: Objectives and indicators concerning the market observation

Market indicators Motivation, prospect, information Supply Demand Supply & demand Market volume Target segments Motivation for usage • Expected market Number of Sector distribution development of energy services suppliers Regional Obstacles Publicity Market structure distribution Efficacy of aids Information channels Regional Usage frequency of Market conditions distribution energy services Sales numbers

Observation and assessment of the market for energy services and other efficiency measures

To create an extensive market overview, a combination of methods was applied. The combination comprises of:

- Literature- and document analyses,
- collection of qualitative information regarding guideline-oriented expert interviews,
- collection of empirical data using standardized questionnaires vie phone interviews and online questionnaires.

The standardized questioning served the purpose of collecting information on the energy services market indicators described above. The questionnaires are available in German language. Four standardized surveys were performed: about 3,000 telephone interviews were carried out with private households and 2,750 interviews with businesses with 10 of more employees. The supply-side was questioned online and via phone. The online survey was e-mailed to about 19,000 relevant addresses directly and disseminated by intermediaries. 210 selected suppliers were interviewed by phone (see **Fehler! Verweisquelle konnte nicht gefunden werden.**).

Table1: Performed standardized surveys

	Sample	Short Description
Supply side		Providers
via phone	210	
online (usable answers)	1,590	
Demand side		
Private households	3,008	Households (tenants/owners)
Businesses	2,757	Businesses

## 3 Market Overview

#### 3.1 Market Volume

According to current figures the volume of the market for energy services, energy audits and other energy-efficiency services amounts to approximately 9 billion Euro in 2016 with varying turnovers for individual products (see Table 2). The data collection method was not identical with the one used in the 2016 survey, meaning that the results of the two years can only be compared to a limited degree. In comparison to the previous year it was possible to increase the reliability and the quality of the figures overall.

Table 2: Market volume of the energy services market

	2016 (survey of 2017)	2015 (survey of 2016)
Energy advice	ca. 790-850 million Euro	ca. 470-520 million Euro
Energy contracting	ca. 7.7 billion Euro	ca. 7.2-8.4 billion Euro
Energy management services	ca. 435 million Euro ca. 200 million Euro	
Total	8.9-9.0 billion Euro	7.9-9.1 billion Euro

With close to eight billion Euro, energy contracting contributes the far largest share of the market volume. It should be noted here that the turnover includes the cost for the actual service, as well as investment costs (approx. a fourth of total turnover) and energy procurement costs (40 to 50 percent of total turnover).

Due to fragmented and diverse supplier structure it is not possible to determine the exact market for energy advice; however, the market volume amounted to approximately 800 million Euro in 2016 according to the 2017 survey. In the field of energy management services the observed market volume increased to approximately 435 million Euro from the previous year (200 million Euro).

Uncertainties or ranges in individual market segments arise, in particular due to the market's heterogeneity, which makes it difficult to provide reliable estimates of the main units. Also, the fuzziness of product distinctions is apparent. With clear definitions of what services each product comprises, it is possible to investigate individual product ranges very precisely, however this results in the masking of other varied and related product versions. In the market, there is uncertainty as to which services are linked to specific products. In a dynamic and innovative market, products change in line with developing demand, technology and economics, thus making it difficult to standardize them.

At 435 million Euros, the market volume for energy management services clearly exceeds the market volume of approximately 160 to 170 million Euros for the specifically surveyed core energy efficiency products. Gross energy management turnover, for instance, may include some hardware for energy measurement- and metering hard, as well as recurring services (e.g. maintenance, accounting, debt collection etc.). However, a concentration on energy management systems related services yields are far too conservative estimate of the particularly dynamic market for digital solutions around energy. Many providers seem to completely or partially include smart metering, submetering and smart homes in energy management (EnM). Digitalisation is the main reason for the increase in the product portfolios in this area. Numerous innovative services which cannot be strictly categorized into the classes of energy efficiency core products are offered in connection with digital products.

Productivity indicators for the individual segments of the energy services market mainly refer to achieved turnovers per full-time employee (in the respective segments). The average value per energy service is particularly high for contracting, with over 500,000 Euro per year and employee, because investment costs - and, especially, the passed-on energy- and investment costs - make up the majority of the turnover (see Table 3). Energy consultants generate an annual turnover of close to 50,000 Euro per employee. This can be explained by the detailed nature of the market and partially by the additional service cross-subsidized market. In the field of EnM

the average turnover per employee is approximately 90,000 Euro. This appears realistic for a business model with a large number of consulting services.

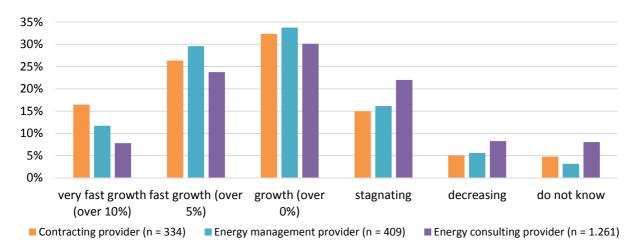
Table 3: Productivity indicator, turnover per employee in the energy services market 2017

	Energy contracting	Energy advice	Energy management
Turnover per employee	ca. 500,000 Euro	ca. 50,000 Euro	ca. 90,000 Euro
Sample	94	496	140

## 3.2 Future Market Development

The majority of the providers questioned expect the market for energy services to continue to grow in the forthcoming years (see Figure 2). Service providers in the areas of contracting and energy management are particularly optimistic, with about 40 % of the respondents assuming strong or even very strong market growth. The market for energy analysis and advice market is also predominantly assessed to keep on growing; however, expectations here are slightly lower and almost one fourth of the providers expect the market to stagnate, which is the largest number among all three market segments.

Figure 2: Estimated development of the own segment by energy service providers



Survey on energy services 2017, Provider

Short evaluation Q1: ES supply, Q23: How do you estimate the market devolpment for ... in the next 3 years?

# 4 Energy Analysis and Advice

Analysis and advice products are distinguished by the content, depth and exact subjects of what is being analysed. However, due to a profound lack of standardization regarding the characteristics of various advice products and of the competencies those providing energy analyses and advice must have the determination of indicators for the market is challenging. Various sources were used to estimate the population of energy consulting providers.

Thanks to improvements of the surveying design and the high participation rate of energy consultants in the survey, it was possible to describe important market parameters, such as prices and turnover more precisely than in the 2016 market survey. In particular, energy companies were successfully integrated as a relevant player in the market for energy analysis and advice. The description of activities of construction businesses, especially crafts, remains difficult because they are represented with comparatively few samples. The providers of energy advice services distinguish themselves by a fragmented and heterogeneous structure (see Figure 3). Almost three out of four respondents state that in 2016 their businesses' turnover was below 500,000 Euro. However, there are also providers with substantially higher turnovers.

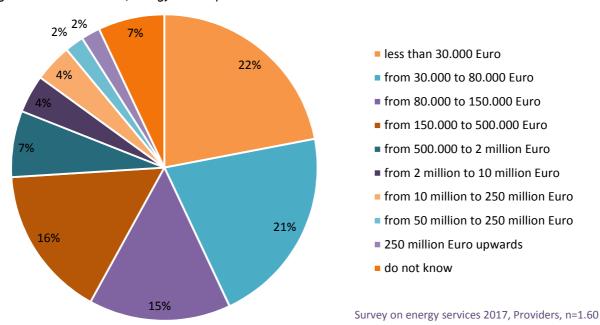


Figure 3: Total turnover, energy advice providers

In those cases, energy analysis and advice services account for about one third of the businesses' total turnover. However, often energy analysis and advice are merely a marginal business in relation to the total turnover. More than 40 percent of the respondents state that these services account for 10 percent or less. Generally speaking, the lower the turnover of a business, the larger the proportion made up by energy consulting.

Taking into account the mentioned unclarity regarding players and products, energy analysis and advice appears as a growing market with a volume of approximately 800 million Euro and 13,000 to 14,000 active energy consultants. Due to changes in the collection methods these figures can only be compared to the figures of the previous year's study to a limited degree, however, the increased number of providers and cases indicate a market growth. The prospects for further market development are assessed positively by providers, however somewhat less optimistic than for other energy services.

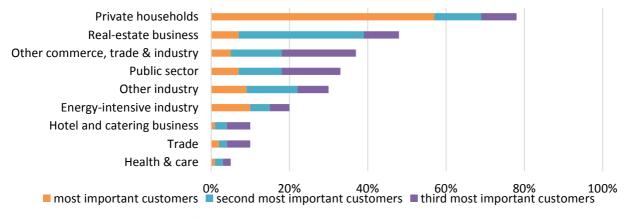
Most providers operate in economically strong and densely populated parts of the country, i.e. Baden-Wuerttemberg, Bavaria and North Rhine-Westphalia. Overall, the nationwide coverage is good, and a sufficient service supply is ensured.

The provider-landscape is homogenous with many micro-businesses specialising in specific consulting areas and customers. Generally, providers are highly educated, with university degrees including specific vocational training and regular advanced training. There are certain variations depending on the type of energy analysis and advice

provided. Consulting for companies is more complex; thus, generally speaking, providers are larger, the advisors have higher degrees and cooperate with other service providers more frequently.

For providers of energy analysis and advice, private households are the most important customer segment, followed by the real-estate sector (see Figure 4). In addition, there are several other customer groups particularly important for specialised businesses, but also for the big picture. These include the industrial sector, commerce/retail/services and the public sector.

Figure 4: The three most important customer groups for energy analysis and advice



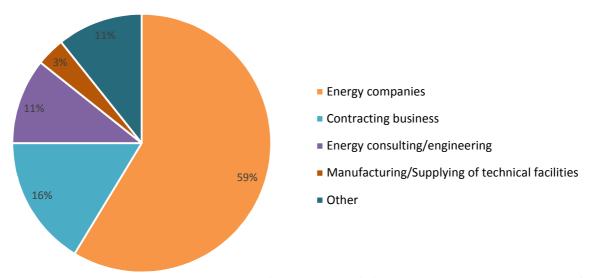
Survey on energy services 2017, Suppliers, n=1.072

The demand side survey reveals that only a minority of households and businesses have used energy analysis and advice. The reason households do not use these services is that they do not see the need for them (no upcoming building improvements, low energy prices, no discernible added value from external consultants), but partially also the lack of awareness regarding the problem. Businesses, too, see only a limited need for energy consulting services and many take care of energy efficiency issues themselves. A key to the future market development is to present the (monetary) added value of professional energy consulting services to the customers in a convincing way.

# 5 Energy Contracting

The merging of data from different data bases, literature research and the current survey, has refined last year's results regarding the market volume for contracting and has also confirmed its order of magnitude. In 2016, the market volume for contracting amounts to approximately 7.7 billion Euro. A population of approximately 560 providers was active. The majority of contracting providers have turnovers exceeding 10 million Euro (partially much higher). Again, energy companies and specialised contractors constitute the greatest share of providers. The majority of providers, around 75 percent, expect the market to grow in the coming years. As before, the market for contracting consists mainly of energy supply contracting. Future prospects for the development of the market for energy supply contracting are assessed to be slightly more favourable than those for the market for energy performance contracting. More than half of the players in energy supply contracting expect at least a high market growth. Contracting is mainly offered by municipal- or other energy companies (slightly less than 60 percent of the providers) and by businesses that define themselves as contractors (16 percent, see Figure 5). Another smaller group of providers are energy advisory and engineering firms with a total of 11 percent, as well as manufacturers and suppliers of technical equipment with 3 percent. There is a tendency to emphasize energy management and maintenance services in contracting, which is fuelled by these types of businesses. The remaining group of other providers (11 percent) consists of businesses with varying focus areas, among them real-estate companies and facility managers, energy agencies and certifiers.

Figure 5: Sectors of contracting providers



Survey on energy services 2017, Providers, n=196, Q2: Which category do you assign your company to?

The majority of the contracting providers have their headquarters in North Rhine-Westphalia, Bavaria, Hesse and Baden-Wuerttemberg. However, Mecklenburg-Western Pomerania has the highest proportion of contracting providers in relation to the region's economic power. About two thirds of the contracting providers operate mainly on a regional level and approximately one in six operate throughout Germany.

Average 50 40 30 20 10 0 Lower Saxony, n=6 Brandenburg, n=4 Berlin, n=6 Saarland, n=1 Saxony, n=7 Saxony-Anhalt, n=5 NRW, n=23 Rhineland-Palatinate, n=5 Bavaria, n=18 Baden-Wuertt., n=14 Schl.-Holstein, n=2 Mecklenburg-WP., n=6 Unterstützt von Bing AverageMedian © DSAT for MSFT, GeoNames, Navteq

Figure 6: Closed contracting deals according to federal states

In Lower Saxony, Berlin and Saarland, contractors on average close the by far highest number of contracting deals (see Figure 6). However, for smaller samples the results are strongly dominated by the presence of a few larger providers in a specific region. In Hamburg, Mecklenburg-Western Pomerania, Thüringen, Schleswig-Holstein and Brandenburg sales figures are rather low.

Energy supply contracting remains the far greatest part of the contracting market. In line with the previous study, the real-estate sector is the key target group for contractors (see Figure 7) with 29 percent of contractors considering this segment their most important customer group. The public sector remains the second most important customer group for energy contracting, considered most relevant by 23% of the contractors questioned.

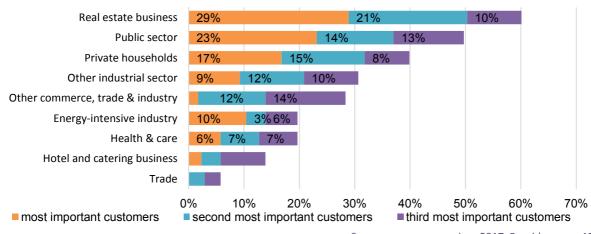


Figure 7: Most important customer groups of contracting providers

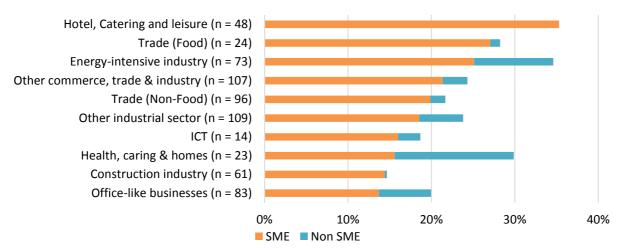
Survey on energy services 2017, Providers, n = 173 Private

households are the third most important customer group; for 40 percent of the contractors, they constitute an important customer group (first or second most important); and for one in six of the respondents even the most important customer group. Due to the rather limited number of contracting projects in owner-occupied housing

facilities, it is possible that the respondents understand these to be projects in the housing market (e.g. tenant power supply).

Among the users of energy services, 35 percent of SME operating in the hotel, hospitality and leisure industry state that they have used contracting during the last five years (see Figure 8). The second and third largest groups are SMEs from the retail- /food sector and energy-intensive industries. The number of non-SME questioned is considerably lower, however the provided energy services are particularly often used in the healthcare-, nursing-and nursing homes-sector, as well as by energy-intensive industries. These sectors and industries are particularly suitable for energy services. Structural characteristics (e.g. larger clusters of comparatively homogenous real-estate) and energy intensity of the target industry (significant energy costs) are important drivers for using energy services.

Figure 8: Use of contracting



Survey on energy services 2017, Businesses, n = 1.072

The

sample values in brackets refer to the absolute number of companies that have used contracting. For instance, 73 of the surveyed companies in the energy-intensive industry have used contracting, which amounts to almost 35 percent of the total of 211 surveyed companies in this sector, with 25 percent SME and 9 percent non-SME.

On the contrary, private households use contracting far less frequently. About 7 percent of residential property owners state that they have used contracting during the last five years.

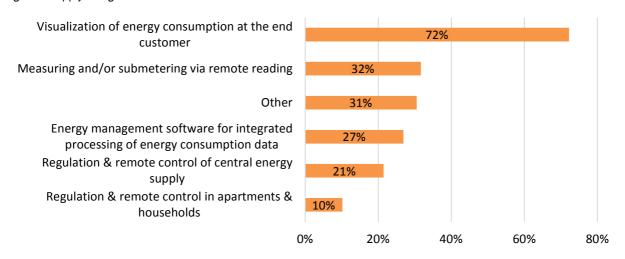
Contracting is mainly used by organizations that have personnel dedicated to energy issues or if the managing director of a company takes care of the topic. For over 90 percent of the respondents, cost savings is the main motivation for using contracting. For 40 percent of the SMEs a legal obligation is stated as the reason for using contracting, while in fact there is no legal obligation for contracting. Providers state that the main barriers to using energy contracting are low energy prices and fast changes of framework conditions in the energy industry. On the other hand, lack of quality or too high competition is not perceived negatively by most.

## 6 Energy Management

The market volume of energy management services amounts to approximately 435 million Euro and is thus from the provider-point of view clearly above the volume of the energy management systems related core products, which amounts to approximately 160-170 million Euro. This indicates that providers perceive the business potential around energy management services considerably higher and as covering a wide range of services aimed at constantly monitoring or controlling energy use. The product portfolio of energy management services is growing fast due to digitalisation. Therefore, it seems that many providers include the growing product area of Smart Metering or Smart Home to the turnover of energy management (by extension or partially). This is confirmed by the importance providers attach to metering and visualising energy consumption and to remote control options. Currently, digital products come with numerous innovative services which strictly taken do not fit into the category of core products.

About 40 percent of 1,800 surveyed providers offer digital solutions. They include mainly the visualisation of the energy consumption for final customers (see Figure 9). Approximately 30 percent of all providers offer (remote) metering, (remote) controlling and energy management services, but only approximately 10 percent offer controlling and remote access for households.

Figure 9: Supply of digital solutions



Survey on energy services 2017, energy services providers, cross-sectional-analysis, Q6e: Which digital services for increasing energy efficiency do you offer? Multiple answers possible. n = 717

According to the survey, energy advisory, engineering and architectural firms make up almost 60 percent of energy management services providers. 14 percent of the surveyed providers of energy management services are energy companies (see Figure 10). IT and software providers, certifiers of energy- and environmental management systems and manufacturers/suppliers of technical equipment are smaller groups with 4 percent each. 15 percent of the providers belong to other business categories, such as energy agencies, contractors, real-estate or facility management companies or trade businesses.

Energy consulting, engineering and architectural offices
Energy companies
IT and software providers
Energy and environment management certifier
Manufacturing/Supplying of technical facilities
Other

Figure 10: Composition of energy management services providers according to company categories

Energy management providers 2017, Q2: Which type pf business do you consider your company?, n = 498

SMEs dominate the market for energy management. They account for 85 percent of all providers. More than 50 percent of the providers are micro-businesses with less than 10 employees. The low employee number correlates with the business categories of the providers. The energy management services providers with higher turnover figures are energy companies, contractors and real-estate companies. More than 70 percent of the providers assess market development to be positive and more than 30 percent even expect the market to grow substantially over the years to come.

According to the location of the headquarters, most energy management services providers are located in the densely populated and economically strong states of Baden-Wuerttemberg, Bavaria and North Rhine-Westphalia. However, there is no lack of services in other regions either because most of the providers offer their services throughout Germany and some even internationally.

For all energy management services providers, the industrial sector is the most important target group (see Figure 11). For 40 percent of the providers, energy intensive industries constitute the most important customer group. Although energy intensive industries constitute a relatively small share of German industries, they account for almost half the energy use in the entire German industrial sector.

Other industrial sector 19% **Energy-intensive industry** Other commerce, trade & industry Public sector Real estate business Hotel and catering business Private households Trade Health & care 0% 10% 20% 30% 40% 50% 60% 70% ■ most important customers ■ second most important customers ■ third most important customers

Figure 11: The most important customer groups for energy management services providers

Survey on energy services 2017, Provider, n = 427

The areas energy-intensive industries (39 percent of the surveyed companies have used energy management services) and other industries (26 percent) show the largest market penetration of EnM systems and energy management services. The share of energy costs is a main driver of the use of energy management services. Half of the companies with a ratio of energy cost to total sales exceeding 30 percent purchase EnM services. Additionally, there are special sectors with a relatively lower energy cost - such as healthcare and nursing, and the public sector - which nonetheless appear to be interesting for providers.

Across all sectors, reducing energy costs is the strongest motivator for implementing a demand-side energy management, followed by environmental and climate protection. For non-SME, legal provisions relating to allocations and energy taxes are important as well.

# 7 Market Environment & Marketing

#### 7.1 Market Facilitation and Promotion

In addition to energy service providers, market facilitators (or "intermediaries") are important for the implementation of efficiency projects. Facilitators like energy agencies and chambers of commerce spread information about energy efficiency, energy services and energy service providers, publish best practices, facilitate networking and organize events to build capacity on energy efficiency among energy users. Their expertise is vital in developing large energy efficiency projects and in bringing complex energy service products to the market. Therefore, this market analysis sheds light on who these facilitators are, what they do and if there are sufficient facilitators available in the market.

Many customers who rarely encounter energy services within the typical framework of their tasks and activities need support when selecting, procuring and implementing services related to energy efficiency. Market facilitators and -promoters can put service providers and potential customers in touch with each other. Ideally facilitators are familiar with the different technical solutions and different ways of implementation (contracting or in-house, financing options and legal requirements). They lower transaction cost for energy consumers and above all provide them with objective and trustworthy information as a basis for decision-making.

Facilitators are often energy advice or engineering firms, as well as energy companies representing each about one fourth of the companies that stated they provided market facilitation services (see Figure 12). Additionally, equipment manufacturers and energy agencies play an important part.

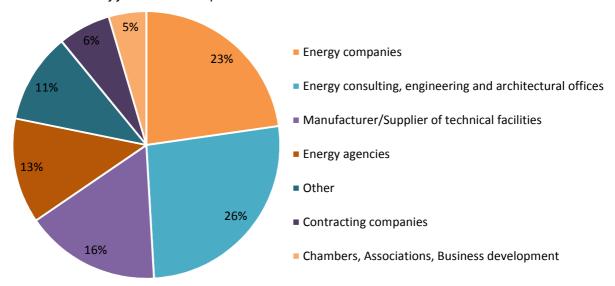
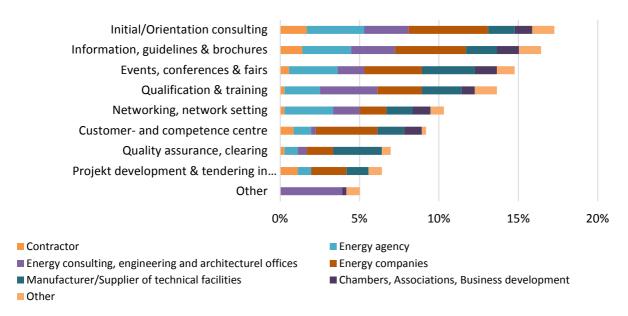


Figure 12: Providers of facilitation and promotion services

Survey on energy services 2017, Providers, who predominantly operate in the market as facilitators (Q1-6), Q2: Which category do you assign your company to? n = 110

The most frequent facilitation and promotion services offered in the energy services market are initial consulting, followed by communicative activities such as information sharing and trade fair participation (see Figure 13). Activities involving personal contact, such as training and networking with market participants, as well as establishing customer centres were mentioned by approximately 11 to 13 percent.

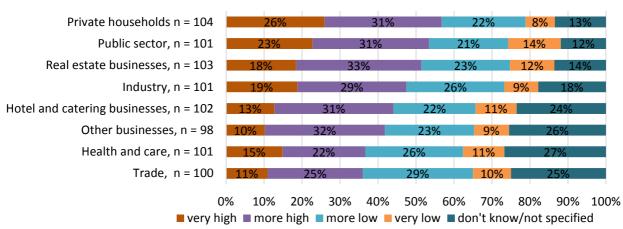
Figure 13: Facilitation and promotion activities



Befragung EDL 2017, Anbieter, die überwiegend vermittelnd im Markt tätig sind (Q1-6), Q9e: Wie unterstützten Sie die Marktentwicklung? n = 359, Mehrfachnennung möglich

Facilitation agents consider households, the public sector and the real-estate sector to have a particularly high support demand in relation to energy services ("comparatively high" and "very high" over 50 percent each). Especially private households have only limited practical experience when it comes to choosing, procuring and implementing energy services and energy-efficiency measures, resulting in a correspondingly high demand for support (see Figure 14).

Figure 14: Support demand of different industries regarding energy services

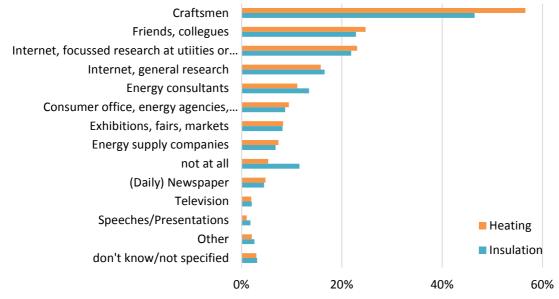


Survey on energy services 2017, Providers, who predominantly operate in the market as facilitators (Q1-6), n=104, Q11e: How high is the mobilization- and support demand concerning energy services of target groups?

## 7.2 Information channels

Most private property owners turn to craftsmen to get information regarding the renewal of their heating system (57 percent) or building facades (46 percent, see Figure 15). They are thir primary source for information about energy efficiency. About one fourth of the surveyed owners also mentioned the internet and information from friends or acquaintances. Only 5 percent of owners do not look for information prior to implementing measures to heating systems; however, 12 percent do not consider it necessary to search for additional information prior to measures regarding their building's facade.

Figure 15: Owner informants regarding new heating systems or insulation



Survey on energy services 2017, Households (Owners)

## 8 Conclusions

The market is quite dynamic, fairly developed and fragmented with very diverse market participants, both on the supply and the demand side. It provides a wide range of products to support energy efficiency. Digitalisation offers numerous new product opportunities, particularly for analysis, monitoring and energy management. However, demand for energy efficiency related services and the rate of professional implementation of energy efficiency measures has to be increased in the years to come. Market facilitators and service providers have to raise more interest for their products and need to better communicate the benefits of energy efficiency to add additional drive to the market and optimally use the potential of digitalisation.

The large standardized survey of 2017 reveals to what degree energy services are provided and sought by various groups and in different parts of Germany. There appears to be sufficient supply of energy services throughout Germany to meet demand. There are no indications of any particular scarcities, considering market prices as an essential scarcity indicator: There is broad acceptance of the price situation on the demand side.

Current results indicate that all segments of the market are growing, albeit at various pace. Private energy companies and public utilities have emerged as a strong group of energy efficiency service providers in addition to energy-, engineering- and architectural firms. Only one fifth of the providers questioned sell energy services as their core business. The vast majority has its core business in other areas and energy services are being managed by one or more separate divisions. To a certain degree, the heterogeneous structure of the providers makes the market robust and flexible; however, market players operating in segments with high demand from the currently very strong construction sector (e.g. technical planners, crafts) may temporarily turn to the core business and away from energy services.

Given a degree of uncertainty regarding the total number of the providers of energy advice in Germany, analysis and advice is a growing market with a volume of approximately 800 million Euro and 13,000 to 14,000 active energy consultants. Providers expect the market to grow further. The market volume of energy-contracting amounted to approximately 7.7 billion Euro in 2016. There are about 560 companies offering energy contracting services in Germany. The market consists mainly of energy supply contracting as well as operation and maintenance models. Market participants expect the young market to grow swiftly over the coming years. About 1,100 suppliers generated about 435 million Euro with energy management services. The total market volume substantially exceeds the turnover generated with core products around energy management systems which amounts to approximately160 to 170 million Euros. Value added services around the frequent / smart metering of energy use is a growing field of business activities. Not all of those services are energy efficiency related, but many services propose heightened security, comfort or assisted living functions. Digitalisation is the main driver for increasing this product portfolio. More than 70 percent of the providers hold an optimistic view of future market development.

The expansion of the market is restricted by limited demand: energy efficiency related services (like energy and energy efficiency in general) do not play a prominent part in the daily life of households or businesses. There are still a large number of energy consumers who do not use energy services and have not implemented significant energy efficiency measures.

Overall, a diversified, innovative supplier market offers a wide and varied range of solutions for key issues of the energy transition. It will be important for providers to create trusting customer relations which take customers' specific needs and operational practices into account. The main motivation to increase energy efficiency for all energy users are energy costs. Particularly for business customers, incentives or obligations resulting from legal regulations are a strong driving force for increasing energy efficiency. Typical barriers and motivations on the customer side provide valuable indications on market levers and on how products can be adjusted to meet real customer needs.

# **Impressum**

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#### Stand

27.03.2018



Das Bundesamt für Wirtschaft und Ausfuhrkontrolle ist mit dem audit berufundfamilie für seine familienfreundliche Personalpolitik ausgezeichnet worden. Das Zertifikat wird von der berufundfamilie GmbH, einer Initiative der Gemeinnützigen Hertie-Stiftung, verliehen.