

2021 SURVEY RESULTS

THE STATE OF ENERGY MANAGEMENT

CHALLENGES, TRENDS AND KEY
INFORMATION ABOUT THE STATE
OF ENERGY MANAGEMENT FOR
ENERGY EXPERTS LIKE YOU

DEXMA
BY SPACEWELL

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Hi Energy Expert!

What's the starting point for energy professionals in this new year?

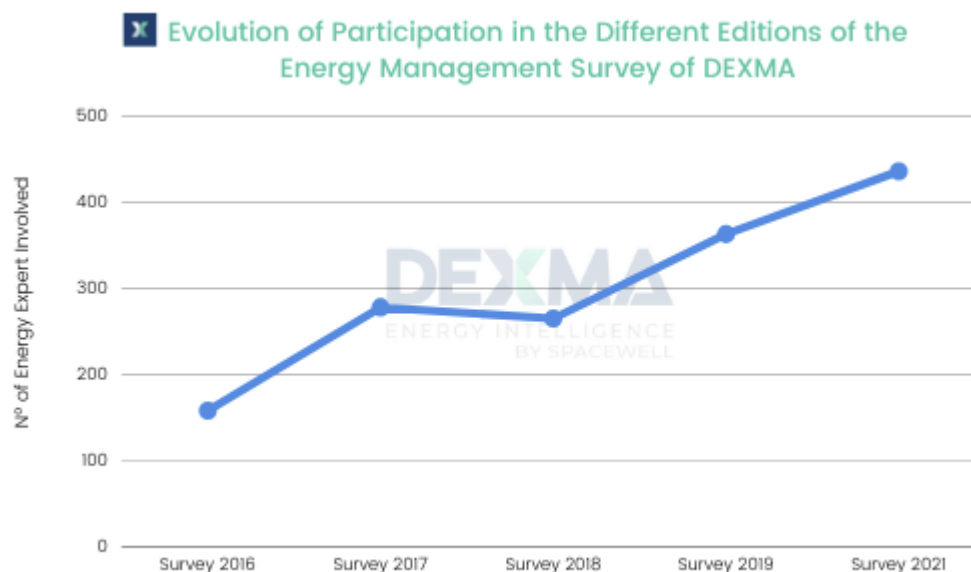
Answer that and further questions with the results of our 2021 Energy Survey.



Thanks to the **400 professionals** who have responded to the State of Energy Management Survey 2021!

It's clear that **energy management generates a great interest for businesses**, whether to be more efficient or to reduce costs.

At DEXMA we're aware about it and we take it very seriously. That's why we launched our first annual survey for energy experts in 2016.



Thanks to this survey we're able to get an overview of the current state of the energy management industry.

We're glad to see that every year more professionals are committed to be more efficient, monitor their energy consumption and even use control and monitoring tools to reach their objectives.

Over the next pages you'll find out **who is part of the energy management industry**, the **priorities** of energy professionals, what **challenges** they face on their day-to-day and what **technologies** they use, among other things.

What are you waiting for to keep on reading?

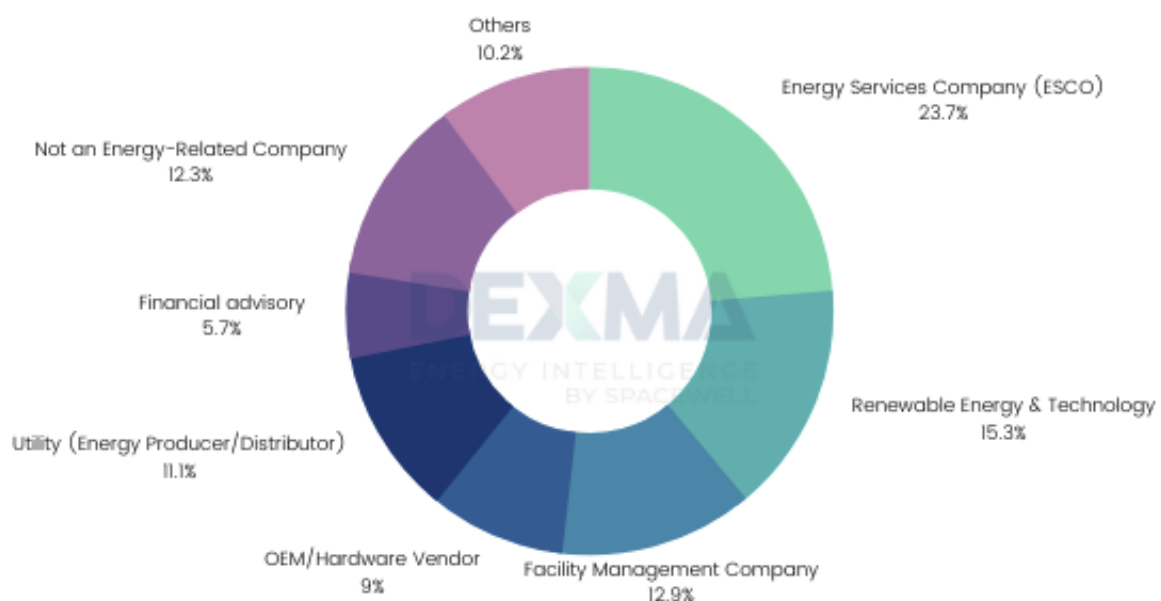
The 2022 Energy Professional

What type of organisations do energy professionals work for? What's the size of their teams? Are they exclusively dedicated to energy management? What's their role in the organisation?

This and other questions will help you figure out who the energy professionals are, how they work and what type of organisation they manage nowadays.

What Type of Organisations do Energy Professionals Work for?

Out of the 400 participants, almost **60% indicated that they work in companies directly related to energy** such as ESCOs, Utilities, hardware vendors and renewable energies.



In previous editions of the survey, the percentage of participants working in Facility Management was quite high, while in this occasion they only represented 13%. Even if their role is not focused solely on energy, they contribute enormously by managing energy for their clients.

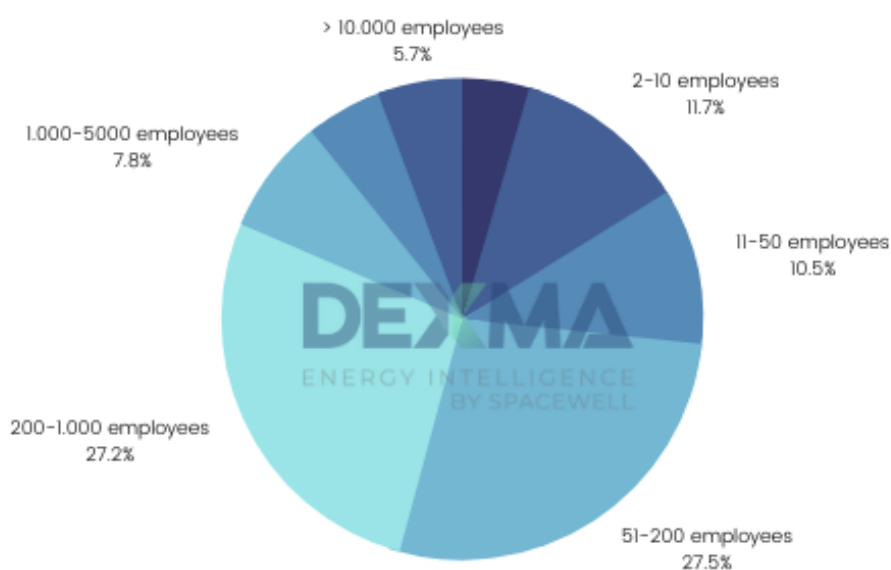
Lastly, over 28% of participants indicates that they work in sectors other than energy, but their professional roles are linked to it. They work in sectors so varied as industry, telecommunications, education, public administration and construction, among others.

We can see there is a large proportion of professionals purely dedicated to energy management in organisations across all sectors, and how energy management becomes more relevant for all of them.

In the “Tell Us More About Yourself” section you will learn a bit more about the challenges, priorities and energy strategies of ESCOs, Utilities and companies in sectors other than energy.

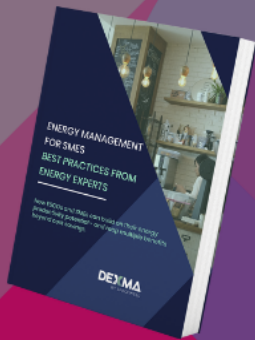
How many Employees does your Company Have?

Regarding the size of the companies our participants work for, **over 50% work in Small and Medium Enterprises (SMEs, under 250 employees)**. 18% indicated that they work for large firms over 1000 employees and 32% work for intermediate sized organisations.



This information shows how organisations of all sizes are interested in becoming more efficient and using less energy.

If you work for an SME and would like to learn more about implementing your energy efficiency strategy, have a look at our specific SME guide [here](#).



Boost Energy Productivity in SMEs

GET THE GUIDE

The professional roles of those who took part in the survey are also varied, but most of them fall into the categories of energy manager, engineer, project manager or business development.

There is one particular job role that stands out from the rest: the **Sustainability Professional**. It is one of the newest roles across many sectors that has grown in importance over the last few years.

How Many Locations do Professionals Manage?

Survey respondents have varied portfolios of locations, ranging from a single building to portfolios of more than 100 sites.

The majority (27%) of energy managers report managing between 2 and 10 buildings. And around 40% manage portfolios of between 11 - 100 buildings. Only one in ten participants manage portfolios of more than 100 buildings.



Those who manage many buildings tell us that their biggest challenges when it comes to DETECTING ENERGY SAVINGS are:

- Understanding quickly and cost-effectively which buildings to focus on, and what efficiency improvements to implement in each building. (83%)
- Getting budget to install monitoring hardware in all locations. (71%)
- Collect and track all energy bills in a more organised way. (58%)
- Start with the first analyses. (51%)

In addition, a high % reported difficulties in convincing managers to carry out audits at some sites. This may be due to a lack of funding, interest or information, so the ideal is to be prepared with good arguments to help them see the benefits.

Here are some reasons that will convince them:

1. Energy is your third biggest expense
2. Energy Efficiency is not a Cost, it is an Investment.
3. If you are not efficient, you will not comply with legislation and could even be fined.
4. Energy prices are rising all the time

If you belong to that percentage of professionals who manage large portfolios of buildings, [DEXMA Detect](#) will help you detect savings opportunities quickly and intelligently.





“Tell Us More About Yourself”

- In this section you'll discover more details about the challenges, priorities and energy strategies of:

- ✓ Energy Services Companies (ESCO)
- ✓ End Customers
- ✓ Utilities

Energy Services Company (ESCO)

Energy Services Companies or ESCOs are one of the key players in the overall effort to reach energy efficiency goals and a more sustainable approach to energy consumption.

What are the key roles within the sector who participates in the energy survey 2021?

As it was expected, 33% of participants working for ESCOs are **energy managers**. But other roles such as **business development** (23%) and **commercial managers** (16%) have grown too.

And now, let's learn more about them, who they are, their challenges and priorities.

Priorities of Energy Professionals

TOP 3 PRIORITIES FOR ENERGY MANAGERS

1

Closing more and new projects

2

Improving efficiency on current projects

3

Investing in new technologies to improve performance

Keeping in mind that 42% of participants mentioned that their overall number of projects has decreased due to Covid-19 during 2021, it is logical that the key priority is now to close new energy efficiency projects.

However, 25% indicated that they had more projects over 2021 and another 25% did not perceive any changes. A small percentage are not particularly sure on the effects of the pandemic on their projects over 2021.

This list of priorities coincides with the responses obtained in previous editions of the survey by DEXMA. No doubt that this trend will continue over 2022.

Main Difficulties and Challenges for ESCOs

One of the issues that generates the most interest and also the most differences is that of challenges. All professionals have challenges and difficulties, but these vary greatly depending on the sector and type of company.

The 3 issues that concern professionals the most are:

1. Generating and maintaining savings (44%)

Analysing existing projects, verifying their savings, as well as forecasting savings for a project in the planning phase, can be an ordeal if the right technology is not in place. For this reason, most professionals in the sector rely on advanced Energy Management Solutions (EMS). We will discuss this topic in more details in the section "Status of EMS Technology and Technology Preferences".

2. Demonstrate the ROI of energy efficiency actions (20%)

Even when companies are committed to their energy efficiency plans, analysing results and demonstrating return on Investment (ROI) is complex for many. **Calculating the ROI of an energy efficiency project is key**, as it will show the viability of the project to funders.

3. Securing the budget for energy efficiency projects

This would be the third most prominent challenge among energy service company professionals (18%).

Energy efficiency professionals know that it is not always easy to find a budget for efficiency programmes. But rest assured, there are many options available both inside and outside your company. Public subsidies, investment, self-financing...

FIND OUT HOW TO FINANCE YOUR ENERGY EFFICIENCY PROJECTS WITH **THE ULTIMATE GUIDE**

[DOWNLOAD GUIDE](#)



Other areas of concern for energy professionals include cost reduction in the current scenario of rising energy prices, as well as compliance with regulations and the search for new projects.

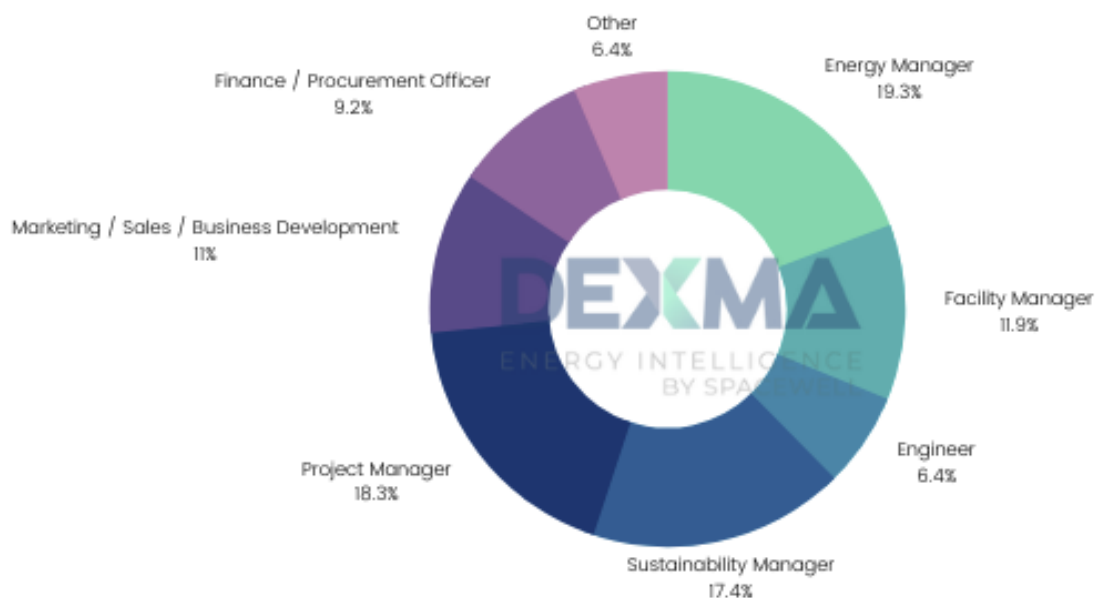
End Customer

By "end-customer" we refer to all participants who indicated that they are not in the energy sector. Of these, **55% said their role is directly related to energy management** in their company.

And what are these roles? According to the response of the participants in the Energy Management 2021 Survey:

- 19% said to work as an energy manager,
- 18% as an energy project manager,
- 18% as a sustainability manager, a new role on the rise among companies

To that 55% of professionals who perform different energy management functions in their companies we can add the 12% who indicated that they are facility managers, as these profiles dedicate in most cases a large part of their time to energy management as well.

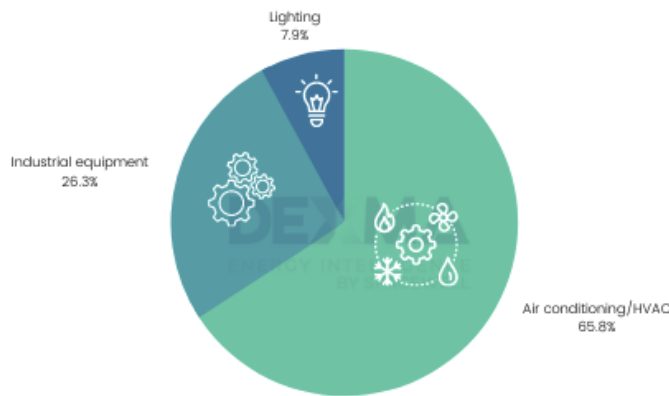


Energy Costs and Sources of Energy Consumption

We asked about energy consumption and which areas are the most energy consuming for our participants.

Did you know that **more than 32% say that energy-related costs account for more than 10% of their total operating costs**, and that almost 50% estimate their annual energy costs to be more than €100,000? In particular, 12% estimate their annual energy costs to be more than €1 million. Imagine the potential for energy savings that these companies may have without even knowing it!

But where do buildings consume the most energy? In general, **participants agree that HVAC/HVAC is the most energy-intensive component in their buildings**, followed by industrial equipment and lighting.



Another aspect that has been of great concern to companies has been high energy prices in 2021. So we asked them:

"How have the relentless increase in energy prices affected your costs?"

39% say that during 2021 their energy costs have increased by more than 10%. In particular, almost 10% say their costs have risen by more than 20%.

Increase in Energy Costs	% of companies that experienced such an increase
0-10 %	42 %
10-15%	20%
15-20%	10%
More than 20%	10%
I'm not sure...	20%

To better understand the extent to which energy costs can rise, let's recreate the following scenario:

Imagine that your company is one of those that previously said its annual costs are around €100,000 and sees this increase by 20%. In other words, your energy cost will suffer an increase of €20,000 in one year.

We know, it is a very global calculation that must take more variables into account, but this example makes us think that the need to invest in energy efficiency in our companies is more important than ever. With a well-planned energy efficiency project, and the right professionals, you can dedicate that cost to the project and obtain an even greater return on investment (ROI).

YOUR INSTANT ENERGY BUDGET

FREE TEMPLATE PROJECT ROI CALCULATOR

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End Customer Energy Management Challenges

When we asked the participants whether their company's energy management strategy was effective, we were surprised that 49% said NO, and 22% said that they did not yet have a defined strategy. Thus, only 19% consider their energy management strategy to be effective.

The reasons why the vast majority of participants have this perception of their strategies may be the challenges they face in managing energy within the company. When we asked them about their top 3 challenges we found that these were:

1. Starting new energy efficiency projects (56%)
2. Verifying energy savings from their projects (54%)
3. Detecting new savings opportunities in existing projects (51%)

To this top 3 list we can add one more that stands out: achieving cost reductions in the current scenario of rising energy prices (46%).

Utilities

In this 5th Edition of the DEXMA Energy Management Survey, we have some dedicated questions for Utilities, one of the major players in the current energy transition.

But first, who were the professionals in the sector who took part?

The majority of respondents (33%) were sustainability managers, an emerging profession within the energy management industry as we mentioned earlier on this report, and especially within the energy trading sector. They were followed by IT Project Managers and B2B Intelligent Solutions and Business Development Managers.

The Utilities' Approach to Energy Management

It is clear that the involvement of energy traders in the energy transition and efficiency is key. That is why **62% of respondents said they already offer energy efficiency management services to their customers**. And although 21% said they are not offering such services yet, they see it as one of their next strategies.

And what types of services are most offered by retailers today?

TOP 3 ENERGY SERVICES PROVIDED BY UTILITIES

- 1** Energy efficiency management (including monitoring, control and optimisation)
- 2** Planning and implementation
- 3** Energy certification for offices, buildings and facilities

Almost half of the retailers already offer integrated energy efficiency management services (monitoring, control and optimisation). And 28% say they offer energy infrastructure planning and implementation services.

These are the main services offered by most suppliers, but what are the most technologically advanced suppliers relying on to be successful?

The answer is...

... Providing value-added services to their customers that make them the perfect energy manager.

If you want to know more about how retailers are becoming the energy manager for their customers, find out more in this [free downloadable guide!](#)

— UTILITY
THE NEW
ENERGY MANAGER

DOWNLOAD PDF



FREE GUIDE





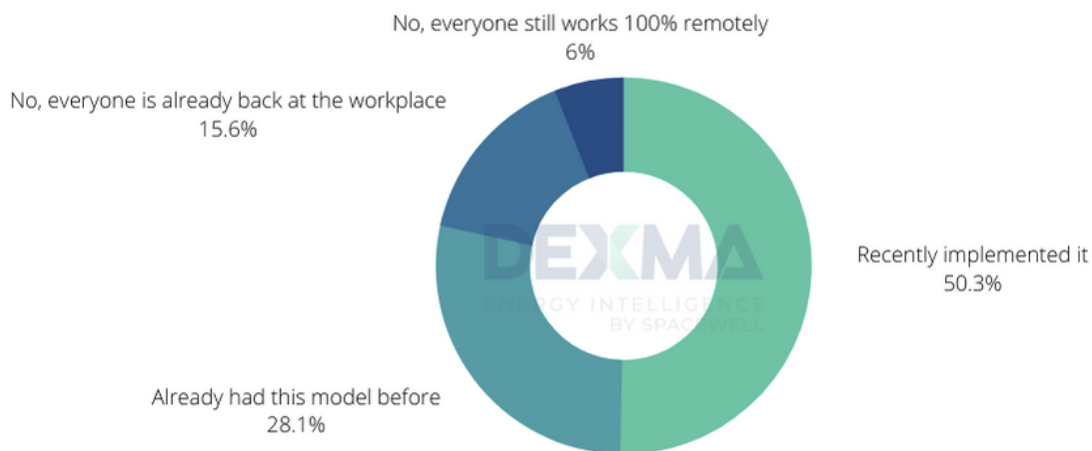
New Trends

This year we have asked about two issues that have gained relevance during 2020 and 2021 due to the pandemic: the working model chosen by companies and indoor air quality monitoring.

Back to the Office and Hybrid Work

One of the most talked about questions over the last 2 years, and one that is of most interest for 2022, is which working model companies are adopting: face-to-face, remote or hybrid.

The answers provide a clear example of how each organisation has adapted differently, but **the trend is towards a hybrid working model**. In fact, almost 80% indicated that they work with this model.



Half of the participants say that their company has recently implemented the hybrid model, combining face-to-face and remote work. On the other hand, almost 30% of companies already had hybrid (or flexible) models before the pandemic, and have continued with them over the last year. Only 6% reported continuing to work 100% remotely, and the rest have already returned to the traditional model.

And in relation to this new trend towards blended working, how is it affecting the energy consumption and efficiency of buildings?

40% of respondents who have adopted a hybrid model indicated that their buildings are now more efficient and consume less energy than before. In contrast, 45% indicated that their buildings are now less efficient, of which more than half are already implementing energy efficiency measures to change this situation.

This leads us to believe that due to the implementation of the hybrid working model, many companies have detected energy consumption deficiencies in their buildings, becoming more aware of the need to implement energy saving measures.

Monitoring Indoor Air Quality

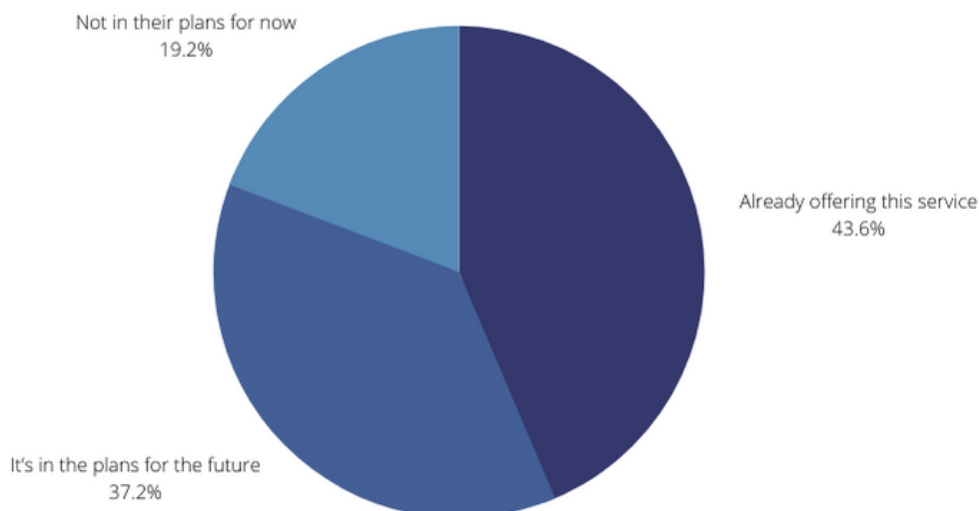
Due to the high levels of pollution in cities, and nowadays due to the dispersion of Covid in enclosed spaces, air quality has become a key issue for companies to monitor.

In the case of indoor air quality, manual ventilation can help, but is it enough? How do you know if you have reached the optimum quality levels? How does this measure affect air conditioning efficiency?

To answer these questions, **regular indoor air monitoring can be very useful**. By monitoring humidity, temperature and CO2 levels, among other variables, information can be extracted to help improve comfort and wellbeing for the building's users.

In the survey, we asked companies whether they have already implemented measures to control indoor air quality, and 44% said they had. While 27% say they have not implemented monitoring procedures yet, but are planning to do so in their next plans.

Such is the importance of this type of building control that **43% of Energy Service Companies already offer these services to their customers**, and another 37% plan to include them by 2022.





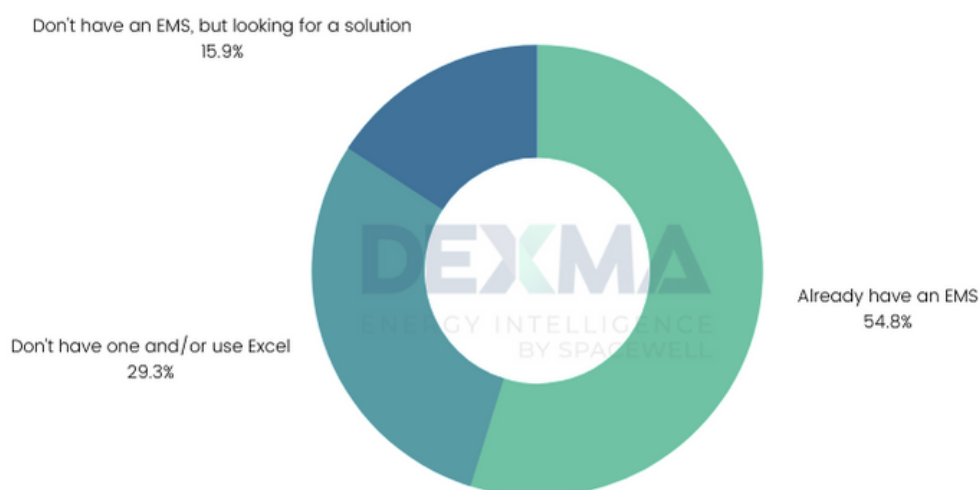
Energy Management Software Usage and Preferences

We have asked participants about their software uses, if they already have an Energy Management Software (EMS) in place, what their main problems are, and what they foresee as tech trends for the future.

The use of energy analysis and management tools such as Energy Management Software (EMS) is becoming more and more widespread among professionals both in Spain and in Europe. In fact, **55% of participants indicated that they already have an EMS** in place.

This is very good news, as it reflects how dedicated and specific energy management technology is becoming part of companies. This is also reflected in the 16% who indicated that they do not have any software but are considering it. However, almost 30% of the participants indicated that they do not have a specialised tool, and continue to work with huge Excel tables.

We understand that each company moves at its own pace, but if you are one of them and want to know more about the utilities and benefits of having an EMS, do not hesitate to consult the [DEXMA website](#) or [contact one of our experts in energy management software](#).



Going back to the 50% who do have an EMS, what is their biggest challenge in using their current software?

The 3 biggest challenges that they have in common are:

1. Lack of integration with other tools (BMS, SCADA,...)

23% of the participants indicated that this is their biggest challenge when using their current EMS.

We know from experience that this is one of the biggest challenges among professionals, but we have good news. There are advanced EMS that can be integrated with other tools, such as the **DEXMA Platform**.

2. Verify energy savings

17% of respondents highlight calculating savings in an energy efficiency project as an issue for them. To overcome this challenge, whether you are using the DEXMA Platform or any other software, it is vital that you can create Measurement and Verification projects on it. This functionality basically helps you to easily and quickly see how your projects are progressing, applying the international IPMVP protocol.

3. Tracking projects

Keeping track of multiple projects is another aspect that complicates the day-to-day lives of energy managers, as 16% of respondents say.

So why is it so important to regularly monitor your energy efficiency projects?

Basically, because monitoring energy consumption in real time will allow you to, among other reasons:

- Know the actual energy savings at different times of the project
- Detect and quickly solve any deviation from expectations
- Know the status of the Return on Investment (ROI) of the Energy Efficiency project.
- Check if you are efficient while maintaining the comfort of the users and the performance of the installations.

We can also highlight, as 15% have indicated difficulties when creating bespoke reports, or when entering or integrating energy data into the EMS as a challenge. Once again, this is a problem that many professionals have with their analysis software, but to a lesser extent than in previous years, which may be indicative of improvements in the available EMS and their processes.

If you belong to the 30% who still work with heavy Excel spreadsheets, or to the 16% who are considering using an energy management solution, we encourage you to try the DEXMA Platform, with which you can:

1. **Detect** the savings potential of your buildings, thanks to big data and Artificial Intelligence.
2. **Perform advanced analyses** in real time, which will help you to monitor your projects, verify the savings obtained, create customised reports and automated alerts, among many other functionalities.
3. **Optimise** your team's tasks, **automating** the energy management process with 24/7 data analysis based on Artificial Intelligence, anomaly detection, and improvements in internal communication processes.

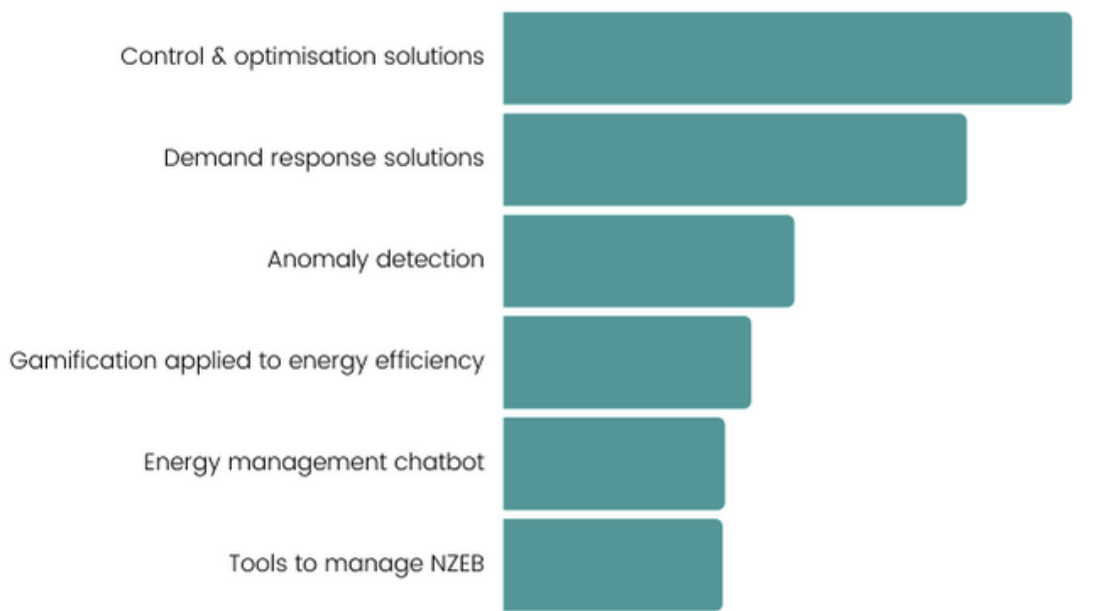
The Tech that will Change the World of Energy Efficiency

The European Green Pact, Biden's green energy policy, the climate change challenges discussed at COP26, and other important events of the last 2 years have brought energy efficiency to a strategic level in business. According to this, what do you think is the trend that will change the world of energy efficiency in the next decade?

According to the respondents the top **3 technology trends in energy efficiency and sustainability technology** will be:

1. Energy consumption control and optimisation solutions
2. Active demand management or demand response solutions
3. Anomaly detection solutions

Other areas such as gamification, chatbots and tools to manage Net Zero Buildings (NZEB) will also be on their radar for the future of the energy efficiency industry.



About DEXMA

DEXMA provides an energy analytics platform for companies that need to measure, analyse, understand and reduce their energy consumption. The platform is a set of powerful cloud-based tools with which companies can make the right decisions to reduce the energy they consume without affecting their productivity or business.

DEXMA was founded in 2007 in Barcelona and was acquired by Spacewell | A Nemetschek Company in 2020. DEXMA already serves over 4.000 organisations in 30 countries after consolidating its expansion through a comprehensive network of partners.

After more than thirteen years working in the energy sector, DEXMA is leading its own initiative to share knowledge on energy efficiency, to promote best practice and educate energy professionals. Check out our free learning resources [here](#).





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