



Europe Operations and Maintenance Benchmarks

WHITE PAPER SERIES #1

Sustainability Programs and Initiatives





International Facility Management Association

IFMA is the world's largest and most widely recognized international association for professional facility managers, supporting more than 24,000 members in 100 countries. The association's members, represented in 134 chapters, areas of interest (six communities) and 16 councils worldwide, manage more than 78 billion square feet of property and annually purchase more than US\$526 billion in products and services. Formed in 1980, IFMA certifies facility managers, conducts research, provides educational programs, recognizes facility management certificate programs and produces World Workplace, the world's largest facility management conference and exposition. To join and follow IFMA's social media outlets online, visit the association's LinkedIn, Facebook, YouTube, and Twitter pages. For more information, visit www.ifma.org.

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Simplar is a collaborative team of faculty and researchers from universities across the United States who specialize in facility organizational assessment, performance measurement and analytics, process improvement, and advanced procurement delivery systems. Learn more at www.simplar.com.

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Sustainability Programs and Initiatives*

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Executive Summary

IFMA has embarked on a global effort to disseminate facility operations and performance data. This white paper focuses on sustainable operations and maintenance practices and is the first in a series of three reports summarizing performance of select buildings throughout Europe. While there is a small sample size for this pilot study, there are relevant findings to consider.

As organizations recognize the importance of conducting business in a socially responsible manner, they are scrutinizing how facilities impact the environment. For example, about 44% of respondents reported their buildings had some green elements, but no certification. Respondents stated that nearly half (49%) of their solid waste was diverted from landfills. However, 79% of respondents stated that they do not track their carbon footprint/CO² emissions.

Facility managers may adopt the variety of efforts to increase the organization's sustainability efforts. For the European region, ISO14001 was the most common tool used (42% of respondents), followed by BREEAM and formal measuring and monitoring processes (29% each). Thirteen percent of respondents did not report the use of any sustainability programs.

A successful sustainability program may require some financial commitment from the organization. Respondents were asked to report what percentage of their departmental budget was currently allocated toward sustainability initiatives. Most organizations (38%) allocate 2% or less annually, while 23% of organizations do not have any funding set aside specifically for sustainability programs. Monitoring key performance indicators and the effect of environmental policies and legislation throughout Europe will be an important task in the future.

This white paper focuses on sustainable operations and maintenance practices and is the first in a series of three reports summarizing performance of select buildings throughout Europe.



Paper Overview

Benchmarking and metrics are terms that are regularly used in today's business environment, but are often misunderstood. Benchmarking is a continuous and systematic management process that measures work processes, protocols and services for the purpose of organizational comparison and improvement. When properly applied, benchmarking can be used to evaluate performance differences in how a facility is operated, as compared to peers.

In this pilot study, IFMA reached out to facility professionals throughout Europe. Individuals from the following countries responded to the survey:

- Austria
- England
- Germany
- Ireland
- Netherlands
- Poland
- Spain
- Switzerland

Note that the information contained in the paper represents a "self-report" from respondents. All information was voluntarily provided, but was not checked with site visits. When interpreting the data, it is important to remember that every facility is different, and every organization operates using different accounting and measurement practices. The data listed in this report will not provide a perfect comparison for your organization to that of another company. It does, however, provide a limited view of facility performance in certain European regions.

Participating in a local IFMA chapter or council benchmarking study is a good way to explore how to improve your facility operations. IFMA's research department can assist companies in forming benchmarking groups and conducting more detailed, smaller-scaled benchmarking studies.

FACILITY BENCHMARKING INSIGHTS

There are several types of benchmarking that an organization can use: internal, competitive, and generic. When conducting an **internal** benchmarking exercise,

a facility manager compares similar functions within their own organization. This is typically done when an organization operates multiple sites or units and comparisons can be made.

With **competitive** benchmarking, a facility manager compares costs, processes, and practices to other organizations' sites within the same industry. While these partnerships typically encounter the most organizational resistance (due to the collaborative nature of potential competitors in the partnership), they can also offer the most rewarding experiences. Competitive benchmarks are particularly useful as they are based on data from peers who experience similar constraints, operating conditions, regulatory requirements, and more. The most successful organizational partnerships are defined by the following characteristics:

- Organizational commitment
- Authority to make organizational changes
- Identified data sources
- Non-disclosure agreements (legal contracts)
- Time commitment
- Identified benchmarking staff and team
- Regular interviews, meetings, site visits
- Agreed upon benchmarking units (Facility, department, system, etc.)

Finally, in the **generic** or process benchmarking exercise, a facility manager analyzes data and best practices regardless of the industry, and concentrates on studying the function or process. Process benchmarking allows facility professionals to leverage "lessons learned" from industry sectors outside of their own to apply best practices.

It is the hope that this pilot study will generate an interest in continued facility operations benchmarking efforts throughout Europe.

ACKNOWLEDGEMENTS

IFMA relies on the willingness and generosity of its members to compile the data and complete this lengthy benchmarking survey. Without their data, there would be no report. We thank these dedicated participants for their contributions.

A committee of subject matter experts worked with IFMA's research department to craft questions and pilot test the survey. The committee members are acknowledged on the inside cover of the report. Nickalos Rocha, IFMA's director of benchmarking, and staff from Simplar, conducted the survey, validated and analyzed the data, created the tables and graphs, and wrote the report.

ABOUT THIS REPORT

To create this report, a committee of IFMA volunteers with expertise in concierge, maintenance, energy management, and sustainability reviewed questions posed in previous IFMA surveys and developed new questions to better match today's practices.

Once tested, the survey was first sent electronically in February 2021 to nearly 2,000 IFMA professional members throughout Europe.

Although the survey was issued to IFMA members, membership was not a requirement to participate. Survey recipients were encouraged to circulate the survey to the person responsible for the activity.

METHODOLOGY

Respondents were asked to provide information on the facilities they manage for a 12-month time period. There were 31 surveys returned during a 12-month time period.

To maintain real world usability of these research findings, statistics are most often provided in terms of absolute number of responses, percentages and mean averages. Percentages may not add to 100% due to rounding or the acceptance of multiple responses. In many cases, some respondents did not answer all questions, so the base numbers differ among the various quantitative findings. A few tables have dashes (--) in lieu of a number because there were not enough responses to generate a valid statistic.

Respondents provided cost data in their preferred local currency. For the sake of consistency, all currencies were converted to U.S. Dollars (USD) based on conversion factors from 18 May 2021. Metric numbers were converted to standard.

This paper is a self-report survey. All data, including respondent identification, was voluntary. As with any research, readers should exercise caution when generalizing results and take individual circumstances and experiences into consideration when making decisions based on the data. While IFMA is confident in its research, it is important to understand that the results presented in this report represent the sample of organizations that chose to supply the requested facility information. See Appendix 1 for a list of acronyms and terminology.

Facility Description



Industries Represented

Comparing a facility's performance to others in the same industry, i.e., competitive benchmarking, is frequently done as part of an organization's quality assessment program. The following chart shows the industry categories represented in this report.

The number of cases presented is the total number of unique respondents that provided partial or complete surveys. As such, the totals vary in each section depending on the number of responses for the given question. Data for individual sectors are not provided due to a limited response rate for each category.

Industry Sector	Number of Cases (N)
Services	36
Manufacturing	8
Institutional	15
Total	59

Respondents were asked to identify the industry served by their facility, grouped into the following sectors:

SERVICES

- Banking (Consumer, Commercial, Savings, Credit Unions)
- Health Care
- Hospitality (Hotel, Restaurants, Hospitality-Related)
- Information Services (Data Processing, Information Services, E-Commerce)
- Insurance (Health, Life, Auto, Mutual, Casualty, Flood)
- Media (Broadcasting, Entertainment, Gaming, Media, Publishing)
- Professional Services (Legal, Accounting, Consulting, Engineering, Architecture)
- Telecommunications (Telecommunications, Internet Services/Products)
- Trade (Wholesale, Retail)
- Transportation (Transportation, Freight)
- Utilities (Water, Gas, Electric, Energy Management)

MANUFACTURING

- Building/Construction (Building, Construction Materials)
- Chemical/Pharmaceutical (Chemical, Pharmaceutical, Biotech)
- Computer (Computer Hardware or Software)
- Motor Vehicles

INSTITUTIONAL

- Association (Association, Federation, Non-Profit Foundation, Society)
- City/County Government (Law Enforcement, Library, Parks/Public Open Space)
- Educational (Training Center, K-12, College/University)
- Federal Government
- Religious
- Research
- Special Districts/Quasi-government (Transportation Authorities, School Boards)
- State/Provincial Government

Facility Use

Property type and sub-type categories used within the Appraisal Institute Commercial Data Standards were applied to allow for a more meaningful comparison. There were 29 facility use categories to choose from, but not all were selected. Note the expansion of the office category. This study breaks office space into three categories: branch, headquarters, and mixed-use where office space is dominant.

Facility Use	Number of Cases (N)
Office	37
Branch/Regional Office	16
Headquarters	16
Mixed-Use Office	5
Industrial/Manufacturing	4
Assembly	4
Educational	3
Other	8
Total	56

**"Other" includes Bank Branch, Data Center, Healthcare, Multi-Use, Research, Transportation, and Recreational Facilities.*

Countries/Regions Represented

IFMA targeted members throughout Europe. The language in the survey was available in English.

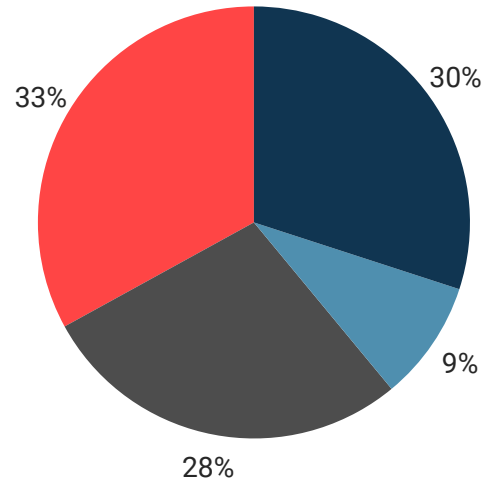
Countries/Regions Represented

Country/Region	N
Austria	3
England	3
Germany	3
Ireland	3
Netherlands	13
Poland	14
Spain	5
Switzerland	4

Facility Description

To provide a more accurate comparison of cost and practices, respondents were asked to provide data on a single-use facility, preferably the largest or most active facility of their portfolio. Thirty percent of the facilities represented in this study are single buildings. A total of 1,360 buildings were included in this study.

Facility Building Description

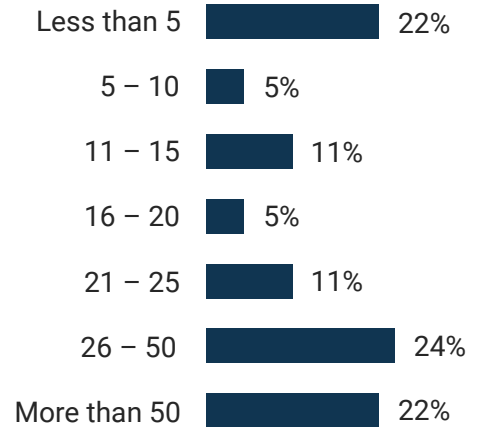


- Space within a building
- A single building
- Multiple buildings in one location
- Multiple buildings in multiple locations

Facility Age

The average age of the facilities in this data set is 38 years; the median age is 30 years.

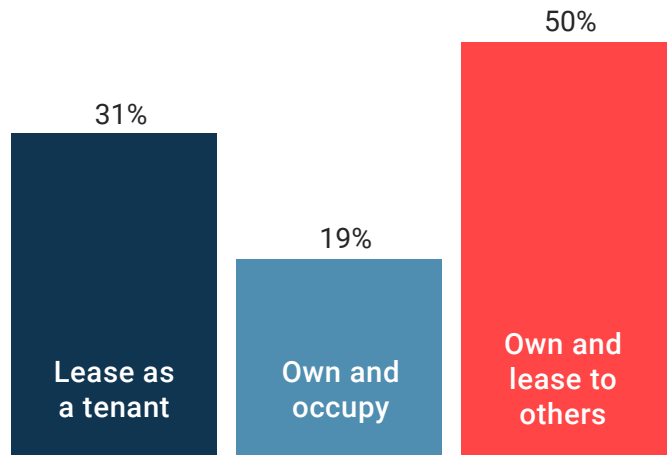
Facility Age (Years)



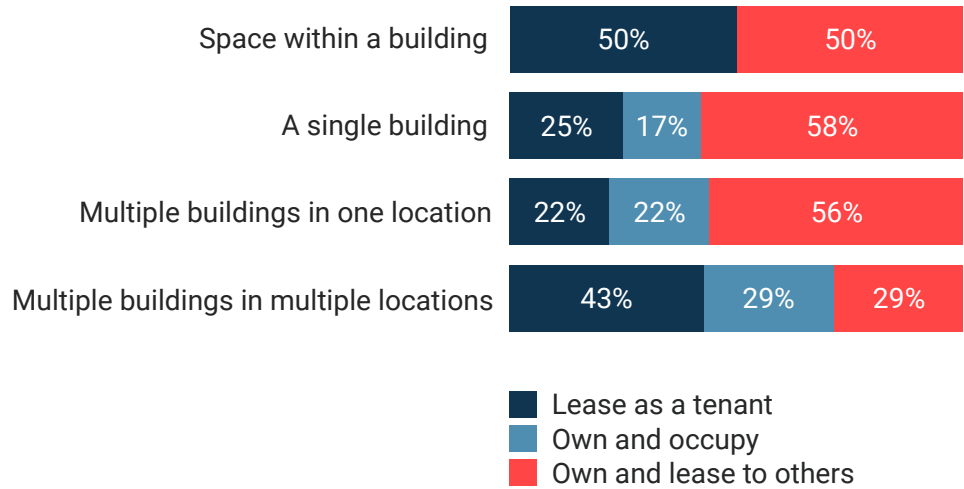
Overall Ownership

About 50% of the facilities in this report are owner occupied.

As the type of space managed includes more buildings and locations, the portfolio expands to include both owned and leased facilities.



Type of Space Managed



Sustainable Operations and Maintenance Practices



Green Certification Status

As organizations recognize the importance of conducting business in a socially responsible manner, they are scrutinizing how facilities impact the environment. About 44% of respondents reported they had some green elements, but no certification. The respondents were asked whether their buildings had any type of “green certification.” No specific definition was provided to the respondents as to what is included within “green” – it may include certifications such as LEED, BREEAM, and others.

Of those with a “green” certification, 50% were for existing buildings and 50% were for newly constructed buildings.

Building Green Certification Status by Industry Served

N = 16

Industry Sector	No Green Elements	Plans for Certification	Green Elements, No Certification	One or More Buildings Certified
Services	10%	0%	40%	50%
Manufacturing	0%	100%	0%	0%
Institutional	0%	0%	60%	40%

Building Green Certification Status by Facility Use

N = 16

Facility Use	No Green Elements	Plans for Certification	Green Elements, No Certification	One or More Buildings Certified
Assembly	0%	0%	50%	50%
Education	0%	0%	100%	0%
Office	10%	10%	40%	40%
Branch/Regional Office	0%	0%	50%	50%
Headquarters	0%	25%	50%	25%
Mixed-Use Office	25%	0%	25%	50%
Other	0%	0%	33%	67%

Recycling

About 86% of the respondents have implemented some type of recycling program. Batteries are most commonly recycled material.

Respondents were also asked to estimate the percentage of solid waste that was diverted from landfills through waste prevention programs. Overall, it was reported that 49% of solid waste was diverted from landfills.

Recycling Program

Item	Percent Recycled
Batteries	92%
Paper	88%
Fluorescent light bulbs	84%
Plastic	84%
Ink cartridges	80%
Computer parts	64%
Cardboard	56%
Chemical waste disposal	56%
Kitchen oil	44%
Construction debris	40%
Aluminum cans	36%
Carpet	32%

Solid Waste Diverted from Landfills

Industry Sector	Percent Diverted
Services	54%
Manufacturing	0%
Institutional	51%

Green Janitorial Practices

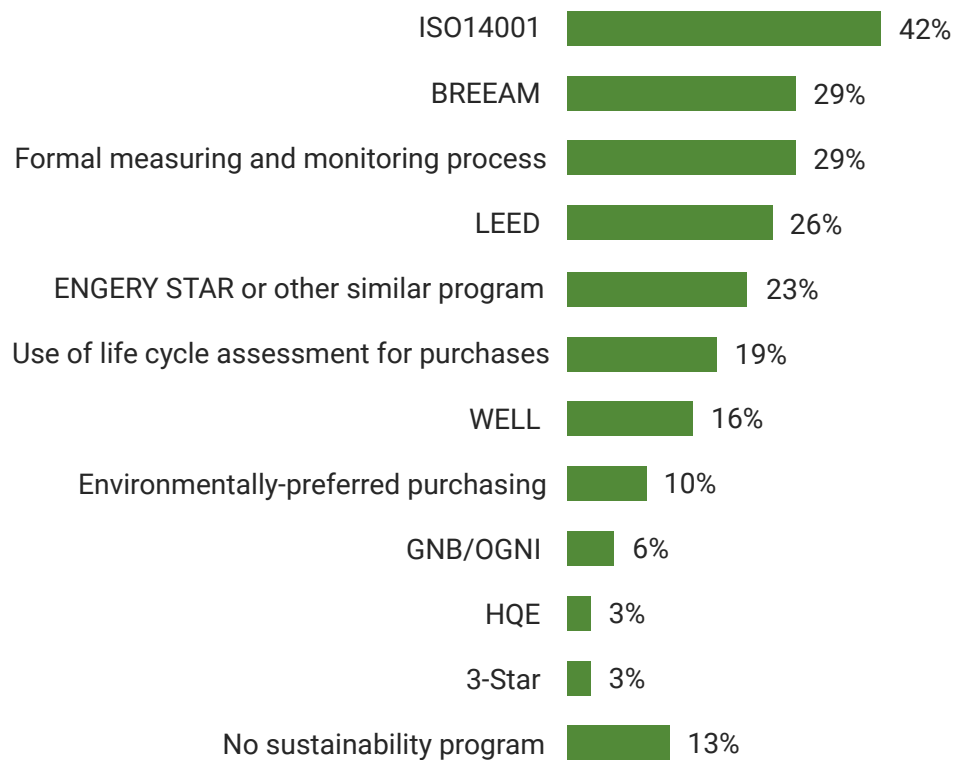
Since cleaning is a labor-intensive process, one of the goals of green cleaning is to minimize exposure to chemicals and cleaning agents to housekeeping staff, workers and visitors while minimizing waste into the environment.

Concierge/housekeeping procedures are audited on a periodic basis	55%
Green cleaning procedures are documented	45%
Green cleaning training is regularly provided and documented	40%
Green cleaning certified staff or contract service	15%
Implemented a green cleaning training program for concierge/housekeeping staff	10%

Sustainable Initiatives/Programs

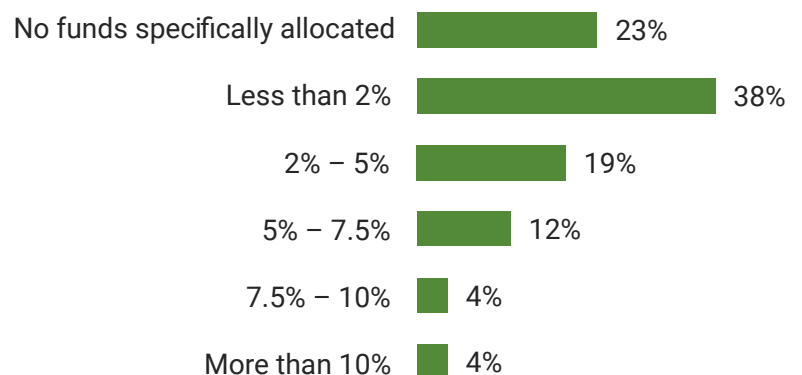
Facility managers may adopt a variety of efforts to increase the organization's sustainability efforts. For the European region, ISO14001 was the most common tool used (42% of respondents), followed by BREEAM and formal measuring and monitoring processes (29% each). Thirteen percent of respondents did not report the use of any sustainability programs.

Respondents were asked if they track their carbon footprint/CO² emissions. A large majority of respondents (79%) do not track this metric.



Sustainable Program Budget

A successful sustainability program may require some financial commitment from the organization. Respondents were asked to report what percentage of their departmental budget was currently allocated toward sustainability initiatives. Most organizations (38%) allocate 2% or less annually, while 23% of organizations do not have any funding set aside specifically for sustainability programs.



Acronyms and Terminology

AVERAGE

Average is also referred to as the mean – the sum or total of all responses divided by the number of respondents.

BUILDING EXTERIOR GROSS AREA (GROSS AREA)

The sum of the floor areas on all levels of a building that are totally enclosed within the building. Measure exterior building gross area to the outside face of exterior walls, disregarding canopies, cornices, pilasters, balconies, and buttresses that extend beyond the wall face and courtyards that are enclosed by walls but have no roof. The building exterior gross area of basement space includes the area measured to the outside face of basement or foundation walls. Exterior bridges and tunnels that are totally enclosed, and constructed areas connecting two or more buildings are included in building exterior gross area.

FACILITY

Collection of assets which is built, installed or established to serve an entity's needs.

FACILITY MANAGEMENT

Organizational function which integrates people, place, and process within the built environment, with the purpose of improving the quality of life of people and the productivity of the core business.

FULL-TIME EQUIVALENT (FTE)

The operational and supervisory “person year” headcount that delivers a facility service on an annual, full-time basis, calculated on a 40-hour work week (2,080 hours per year).

GROSS SQUARE FOOT (GSF)

Basis used for utility calculations.

KILOWATT HOUR (kWh)

A unit of work or energy, measured as one kilowatt (1,000 watts) of power expended for one hour. One kWh is equivalent to 3,412 BTUs.

INTERIOR AREA

Respondents were asked to provide the interior gross floor area (GFA), which was defined as the portion of the inside finished surface of the permanent outer building wall which is 50% or more of the vertical floor-to-ceiling dimension. For example, if a window is more than 50% of the wall height, then the inside of the glass is the dominant portion. ANSI/BOMA Z65.1 provides additional details. The janitorial and maintenance cost metrics were based on the interior area.

MAINTENANCE COST CATEGORIES

Maintenance costs are divided into the following six categories: external buildings, interior systems, roads and grounds, utility/central system, process treatment/environmental, and other costs not included in the other categories. The maintenance chapter provides detailed examples of costs included in each category.

MAJOR VERTICAL PENETRATIONS

Major vertical penetrations include stairs, elevator shafts, utility tunnels, flues, pipe shafts, vertical ducts and their enclosing walls.

MEAN

See definition for average. Mean and average are used interchangeably and the interpretation is the same.

MEDIAN

The middle value in a range of responses is the median. One-half of all respondents will be below this value, while one-half will have a higher value. The median is also known as the 50th percentile. The advantage in using the median is that it is not affected as much by extreme highs or lows in the range of values as is the case with the mean.

MULTI-USE

In this report multi-use describes facilities with two or more primary uses, such as a single site that encompasses headquarter offices, as well as production or research facilities.

N

N is the number of cases supplying the data being described. It is important to note the size of the sample for the value you are comparing.

PERCENTILE

Percentile indicates dispersion of data. A specific percentile identifies where a value lies in relation to other values in a range of responses. The 25th percentile is the lower one-fourth point in the range of values in the group. The 50th percentile, also referred to as the median, represents a value of which one-half of the group falls below and one-half falls above. The median is not affected by extreme high or low values, whereas the mean could be distorted.

PLANNABLE AREA

Plannable area is equal to the sum of the following areas: restricted areas, interior encroachments, occupant void areas, unassignable areas, assignable areas, and secondary circulation. It does not include: primary circulation, service areas (lobbies, walkways, security desks), and major vertical penetrations.

PREVENTIVE MAINTENANCE

Preventive maintenance is a type of planned maintenance having an equipment maintenance strategy based on replacing, overhauling, or remanufacturing an item at a fixed interval, regardless of its condition at the time.

SITE POPULATION

The number of full- and part-time employees, contract workers and/or tenants located at the facility or facilities.

STATIONARY ENGINEERS

Stationary engineers (also called licensed engineers) are licensed personnel assigned to operate a power plant including the steam and hot water boilers or a chilled water plant.

VOID AREAS

Rooms that are more than one story in height. Void areas exist on upper floors, such as atriums, light wells or lobbies.