SUSTAINABLE CERTIFIED BUILDINGS



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The Polish Green Building Council (PLGBC) is a non-governmental organisation which since 2008 has been working for the transformation of buildings, cities and their surroundings in such a way that the way they are planned, designed, constructed, used, modernised, demolished and processed is as sustainable as possible.

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The organisation supports the creation of sustainable buildings for all by:

- activities related to climate change mitigation and adaptation,
- applying the principles of the circular economy,
- enhancing well-being, quality of life and the health of society,
- enhancing biodiversity.

PLGBC is part of a global community of around 75 green building councils within the World Green Building Council.

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Administrative Breakdown of Certified Buildings

The following report has been developed using information from the database of certified buildings run by PLGBC at https://baza.plgbc.org.pl/. The database provides useful information on each of the buildings included and can be filtered in several ways.

Although last year's report was written after the COVID-19 pandemic had already passed, unfortunately the outbreak of war in Ukraine became the most significant event that affected our economy and consequently the construction sector.

The construction industry has felt the effects of the war mainly in terms of the availability and price of building materials. It is estimated that the cost of materials has increased by more than 25%, which had a direct impact on the price of construction materials. As a result of the disruption to supply chains and the reduced availability of raw materials, much of which came from countries directly affected by war or with economic sanctions, the ability to obtain the materials needed for construction projects was limited¹.

However, despite such unpredictable external factors, new certifications in the Polish market are developing at a stable, steady pace.

1 CAS, Poland. CAS report April 2022 - Results of the study on the impact of the war in Ukraine on the implementation of construction projects in Poland (in polish) https://www.caservices.pl/raport-wplyw-wojny-w-ukrainie-kwiecien-2022/ [accessed 29.03.2023]

SUMMARY OF PERIOD MARCH 2022-MARCH 2023

During the period under review, the dynamic growth of warehouse space continued. Following an increase of 4 million m² in the previous year, the sector has now grown by almost 6 million m². The sector has thus overtaken office buildings - the previous leader in certified space.

The PLGBC's certification for residential buildings made its debut with two pre-certified projects covering a total of 27 buildings. The ZIELONY DOM certificate (English verbatim translation 'GREEN HOUSE') recognises investments with high environmental quality and energy efficiency and the associated reduction in operational costs. It was created in response to the need to provide developers and investors with a simple but ambitious tool to highlight the quality of residential projects and to become a conscious part of green building in Poland².

The number of buildings certified in more than one multicriteria certification system is also steadily increasing. Most often this is a combination of BREEAM or LEED with WELL, but other combinations also occur. In addition, between March 2022 and March 2023:

The first WELL recertification was awarded in August 2022 - for Skanska's office in Spark C (New & Existing Interiors).

The Cushman & Wakefield office in The Warsaw Hub was certified in November 2022 in WELL v2 Pilot (Space I lease - first of its kind). This is the second v2 Pilot certification in Poland.

In addition to offices, retail space (three assessments; July 2022) and hotel space (May 2022) were also assessed in WELL Health-Safety.

Rondo 1 building passed its second LEED v4.1 recertification (November 2022) with a Platinum rating. This is the first building in Poland to be recertified for the second time (it was first certified in 2011 under the LEED Existing Buildings system).

The number of LEED v4.1 recertifications continues to grow - since April 2022, there were five buildings (including Rondo 1).

BREEAM 2016 New Construction (November 2022) and LEED New Construction (January 2023) were certified for the first time for the Boiler House (Polmos Żyrardów).

The number of BREEAM In-Use certified bank branches is increasing (Bank Handlowy in Warsaw - December 2022; ING Bank Śląski - January 2023).

New BREEAM certifications for existing buildings are now virtually all International Commercial v6 In-Use.



GENERAL DATA

In recent years, sustainable construction has become an integral part of the construction industry. In this context, the parameter of the certified floor area of buildings is a key indicator to determine the state of sustainable, certified construction in Poland.

Currently, more than 36 million m² of usable floor area of buildings are certified in multi-criteria systems (**Figure 1**), which represents an increase of 27%, which is more than 7.7 million m², compared to the previous period analysed. The largest increase in certified space was in BREEAM certification, with an annual increase of 31%, mainly due to dynamic growth in the warehouse sector.

There were no new DGNB certifications in the reporting period, while no further HQE buildings have been certified in Poland since 2018. Two pre-certifications of the PLGBC's certification system - ZIELONY DOM with a total area of 13,300 m² were issued for the first time in the year under review.

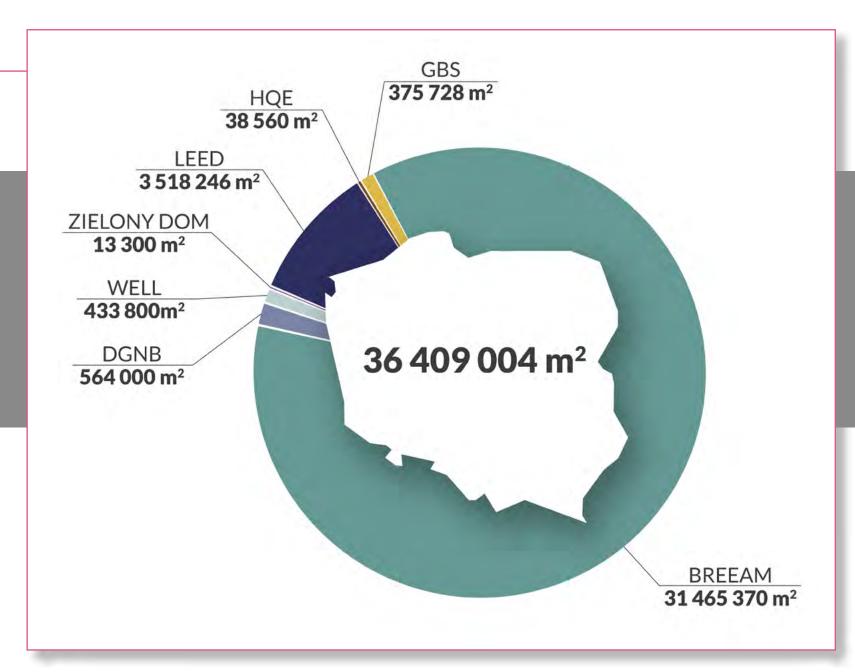


Figure 1 Usable floor area of certified buildings

By March 2023, there were already more than 1,600 certified buildings (Figure 2), statistically the largest increase in the number of certified buildings in three years.

As in previous years, BREEAM maintains its leading position with a market share of almost 82%, while the share of all other certifications is decreasing. The exception is ZIELONY DOM which, despite its debut this year, has already achieved a market share of 1.6%.

The overview includes designed, under construction and existing buildings. It also includes pre-certified buildings (LEED, WELL and ZIELONY DOM) and excludes buildings that are only registered in the systems.



Figure 3 Increase in the number of buildings

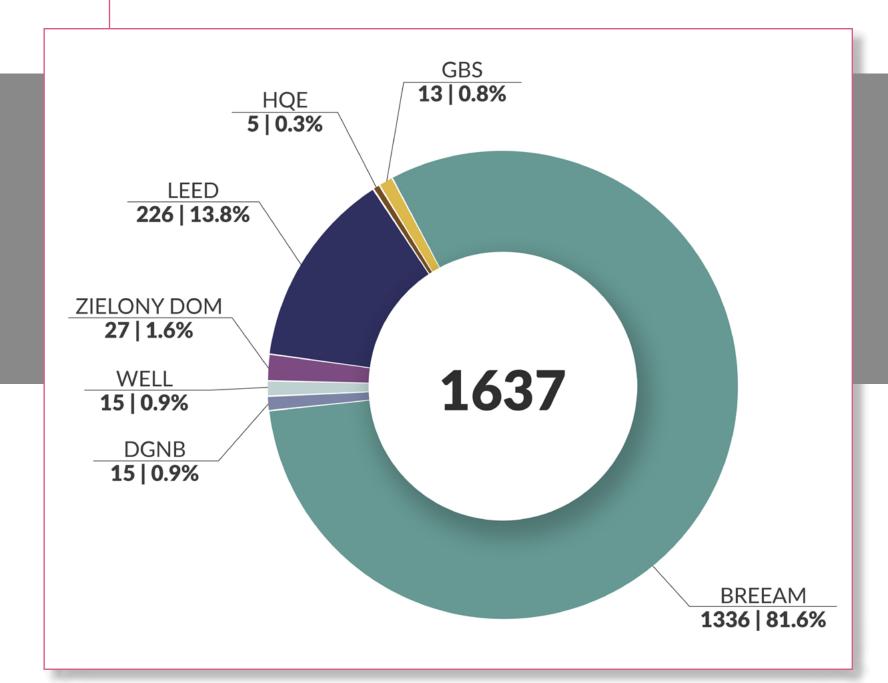


Figure 2 Number of certified buildings

Compared to last year's figures, the annual increase in certified buildings is down by 3.5 percent (Figure 3), while the total number of certified buildings is the highest in three years at 273, up from 259 last year.

For several years now, there has also been a trend towards certifying larger buildings.



ANALYSIS OF THE SYSTEMS

This section of the report presents the analysis for each system separately.

BREEAM saw an annual increase in the number of buildings by 21%. There were 235 buildings - one less than last year. There is a general trend for the number of new certifications in this scheme to stabilise at over 200 buildings per year.

A total of 1,468 certificates have been delivered under BREEAM to date (Figure 4A), of which 792 are BREEAM In-Use for existing buildings. It should be noted that there are two separate BREEAM In-Use certificates: Part 1 - Asset Performance and Part 2 - Management Performance, with 469 and 323 certificates respectively.

This year, for the first time, the largest number of certificates were delivered to new buildings: 138, bringing the total number of new building certificates to 661, of which 552 (84%) were final certificates and 109 (16%) were interim certificates, which are issued at the design stage. In the other certifications available under BREEAM: Refurbishment & Fit Out and Communities, there were a total of four new certifications.

As in all previous years, BREEAM ratings are at a very high level, with Very Good, Excellent and Outstanding representing 84% of all ratings (Figure 4B), which may indicate the high standard of certified buildings.

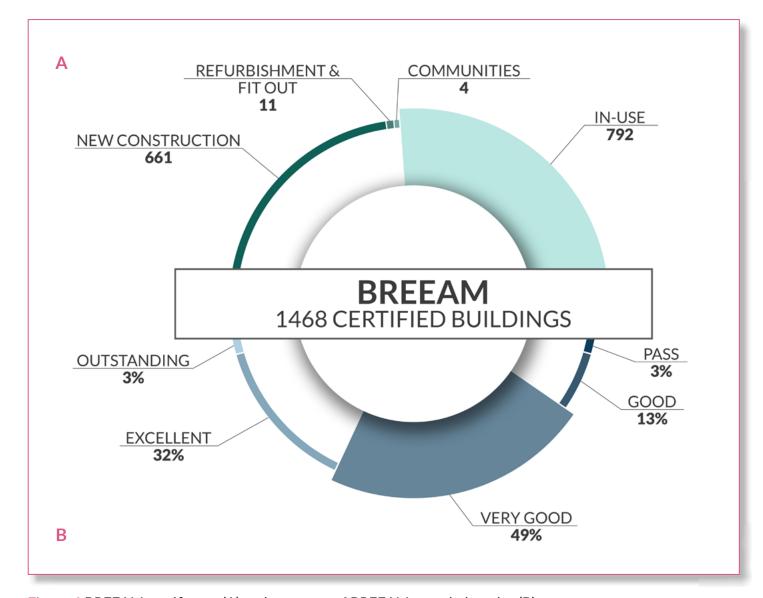


Figure 4 BREEAM certificates (A) and summary of BREEAM awarded grades (B)



LEED certification has seen a very low increase in the number of certified buildings, at six, whereas in the last two years it was 12 buildings per year. In Poland, 246 LEED certificates have been issued so far (Figure 5A).

The system includes Core & Shell and New Construction scheme for new buildings, Existing Building Operations & Maintenance for existing facilities, and Commercial/Retail Interiors for specific building areas. In addition, the Schools and Warehouse/Distribution Centres scheme have also been applied. Noteworthy is the decrease in the number of Existing Building Operations & Maintenance certificates due to the non-renewal of the certificate, which is issued for a fixed period.

LEED ratings are also high. The top two ratings account for 92% of all ratings (Figure 5B).

There have been no new certifications in the German DGNB system since 2020. A total of six certificates have been awarded in this system, covering 15 buildings, with one certificate covering 10 buildings.

A similar situation exists in the French HQE system, where no new certificates have been awarded since the end of 2018. Five residential buildings have been certified under this system for almost five years.

The Polish Green Building Standard system currently has 13 certified buildings, one more than last year.

There are 15 WELL certified buildings in Poland. In this certification system, some buildings apply for the Health & Safety Rating standard. This rating is not included in the overall overview due to its single-criteria nature and short validity period.

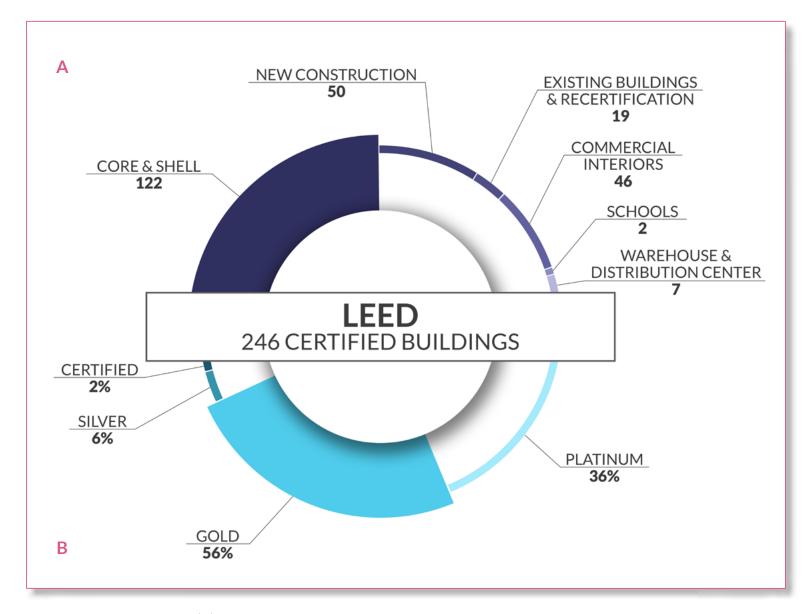


Figure 5 LEED certificates (A) and summary of LEED awarded grades

For the first time in Poland, two pre-certificates were issued for PLGBC's own ZIELONY DOM certification, covering a total of 27 buildings.

It should be noted that currently only buildings at the design stage are pre-certified under this scheme, while full certification is possible after construction is completed.

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NEW AND EXISTING BUILDINGS

As it can be seen, most schemes allow certification of both new and existing buildings. In the case of new buildings, the assessment procedures can be considered as similar, while the schemes for existing buildings differ significantly, mainly in terms of the aspects assessed and the costs of certification.

The ratio of new buildings to existing ones is almost identical to the previous period. The share of new buildings is currently 64%, while the share of existing buildings is 36% (Figure 6). The annual increase in the number of certified new buildings is 23%. Certificates for existing buildings showed an annual increase of 16% - less than half the rate of the previous year.

It should be noted that in the current compilation, new certificates for existing buildings were predominantly in BREEAM.

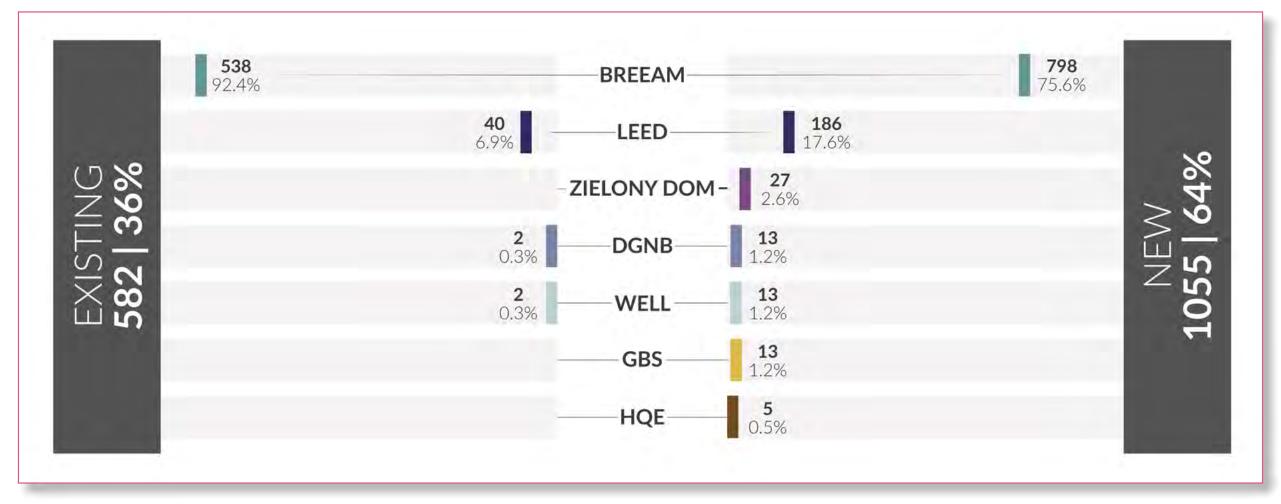


Figure 6 Newly constructed and existing certified buildings

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Another important parameter providing a picture of the Polish certified building market is the certified floor area.

Compared to the previous year, the certified floor area of new buildings increased by almost 6.9 million m^2 and that of existing buildings by about 0.9 million m^2 .

The share of the certified floor area of newly constructed buildings amounted to 65% of the total certified building floor area and is 6% higher than in the previous analysis period. The area of existing buildings is mainly certified under the BREEAM system and represents almost 95% of the certified area of existing buildings.



Figure 7 The usable floor area of newly constructed and existing certified facilities

BREAKDOWN OF CERTIFIED BUILDINGS BY SECTOR

In recent years, there has been an annual decline in the share of number of office buildings that have been certified in Poland. Office buildings account for more than 42% of all buildings and are always at the top of the ranking (Figure 8).

This is followed by logistics and industrial buildings, which already account for 33%. The share of the residential sector has been increasing for a number of years and now stands at more than 10%.

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The share of other buildings has remained almost unchanged compared with the previous period.



Figure 8 Breakdown of certified buildings by sector



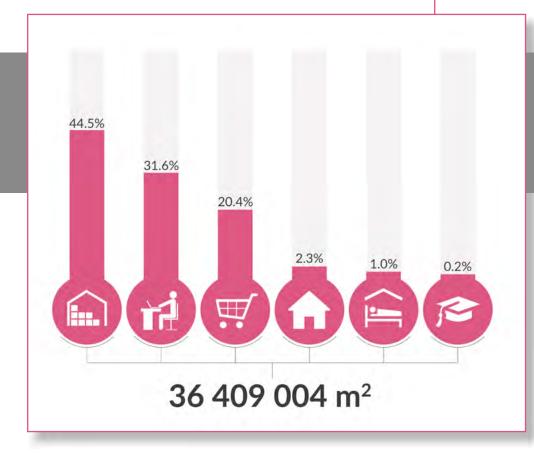


Figure 9 The usable floor area of certified buildings by sector

For the first time, the largest share of certified floor area was achieved by logistics and industrial facilities (44.5%) (Figure 9). This number increased by almost 14% compared to last year.

The largest drop in usable area share was recorded for office buildings, which now account for almost a third of all certified buildings, with a decrease of more than 16%. The usable area share of retail buildings also fell slightly, by around 3% year on year.

The annual increase in the number of certified buildings is also an important parameter in the current report. As in the previous year, the largest number of certified buildings - 143 - was in the logistics and industrial sector (Figure 10).

In the residential sector, 53 new buildings were certified (half of them under the ZIELONY DOM system), which constitutes an increase of 83% compared to the previous period.



Figure 10 Increase in the number of certified buildings by sector

Modern office space at the end of 2022 was 12.7 million m², of which more than 90% is certified area (Figure 11), which represents an increase of 3% compared to the previous year. Warsaw's modern office buildings are steadily approaching 100% certification.

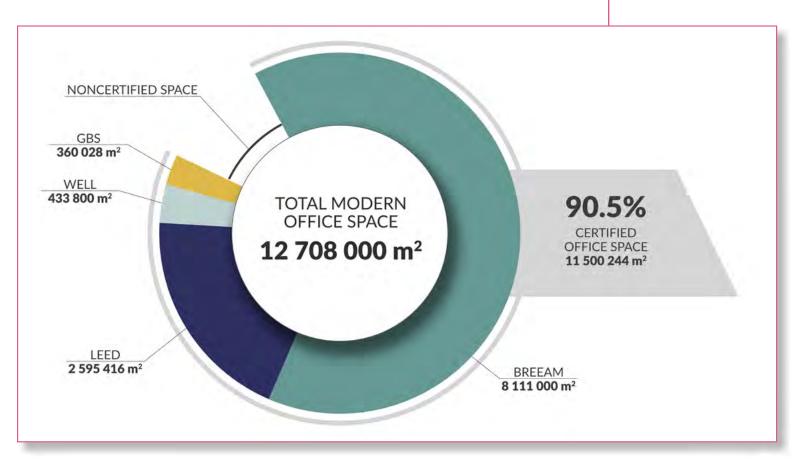


Figure 11 Share of certified office space in relation to total modern office space

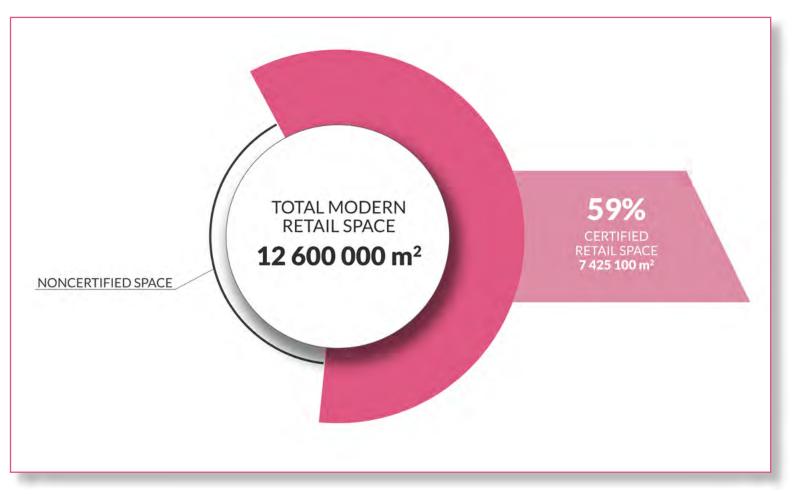


Figure 12 Share of certified retail space in relation to modern retail space

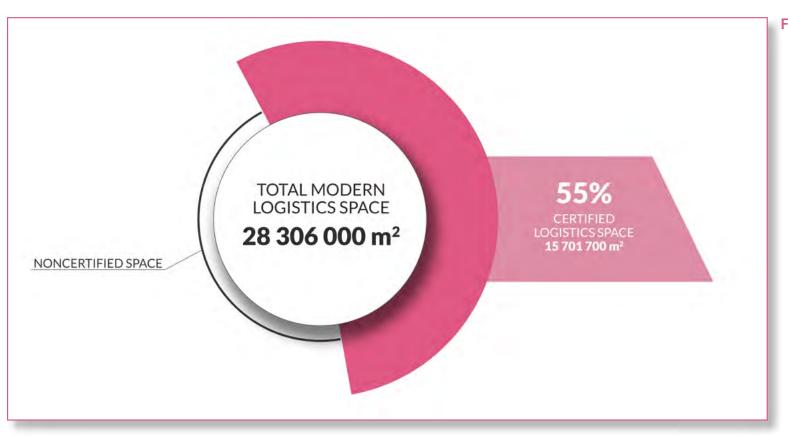
The share of certified space concerning total modern retail space⁴ is 59% (Figure 12), an increase of 5% compared to the previous year.

³ Knight Frank, Poland. Review 2022 & Outlook 2023. Commercial real estate market https://www.knightfrank.com.pl/research/review-2022-outlook-2023-pl-10026.aspx [accessed 27.03.2023]

⁴ CBRE, Poland. Prospects for the real estate market in Poland 2023 https://www.cbre.pl/en-gb/insights/reports/poland-real-estate-market-outlook-2023 [accessed 28.03.2023]



WAREHOUSE AND INDUSTRIAL FACILITIES



SUSTAINABLE CERTIFIED BUILDINGS

Figure 13 Share of certified warehouse space in relation to modern warehouse space



Figure 14 Annual growth of certified warehouse and industrial space

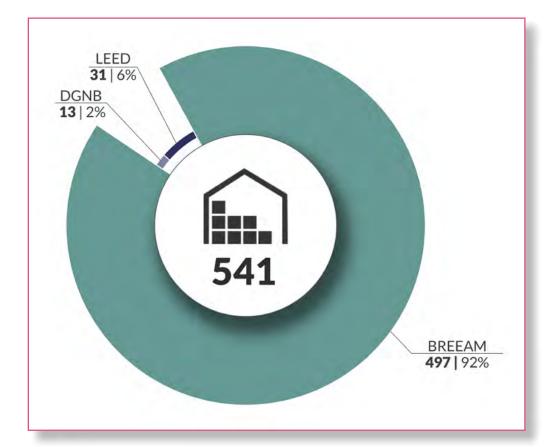


Figure 15 Warehouse and industrial buildings - a breakdown of certification schemes

For several years, there has been a strong increase in the certification of logistics facilities. Compared with the previous year, more than 4 million m² of modern warehouse space has been added, bringing the total to 28.3 million m² ⁵.

For the first time, the share of certified warehouse space in total modern warehouse space has exceeded half and now stands at 55% (Figure 13), with an increase of around 14% per year since 2021.

In the current breakdown, the annual increase in certified industrial/warehouse floor area is 56% (Figure 14), represented by 541 buildings (Figure 15). Compared to last year, this represents an increase of 143 buildings. It should be noted that 92% of all buildings of this type are BREEAM certified.

⁵ Knight Frank, Poland. Review 2022 & Outlook 2023. Commercial real estate market < https://www.knightfrank.com.pl/research/review-2022-outlook-2023-pl-10026.aspx [accessed 27.03.2023]



RESIDENTIAL BUILDINGS

There has been a steady increase in interest in the certification of residential buildings since 2020. During the year, 53 new buildings were certified (Figure 16), an increase of 45% compared to the previous year. The annual growth in residential certification is seen in BREEAM and ZIELONY DOM, with almost equal numbers of buildings certified - 26 and 27 respectively.

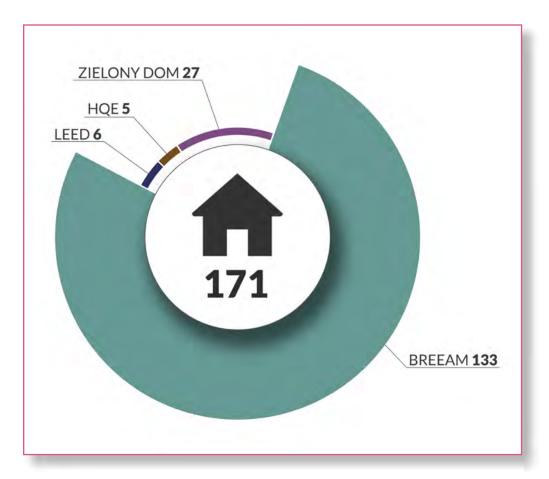


Figure 16 Number of certified residential buildings per certification scheme

POLAND - THE LEADER IN CENTRAL AND EASTERN EUROPE

Poland has consistently been the leader among the Central and Eastern European countries in the number of certified buildings for several years⁶. Just over 46% of the region's certified building stock is located in Poland (Figure 17).

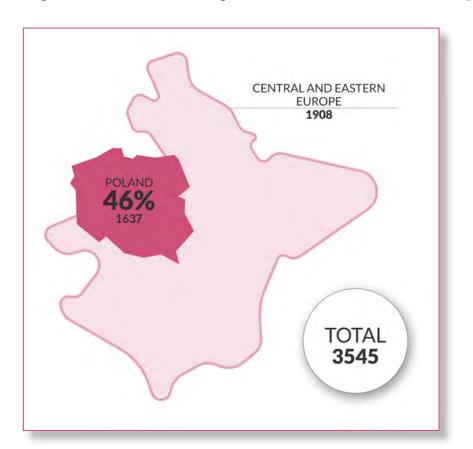


Figure 17 Certified buildings in CEE region

6 At the time of this analysis, the following numbers of certified buildings for each country were obtained from the publicly available databases of the BREEAM, DGNB, HQE, LEED and WELL systems: Czech Republic: 591, Romania: 472, Hungary: 316, Slovakia: 148, Lithuania: 103, Bulgaria: 74, Latvia: 60, Serbia: 56, Estonia: 53, Ukraine: 15, Croatia: 13, Slovenia: 7



ADMINISTRATIVE BREAKDOWN OF CERTIFIED BUILDINGS

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As before, the largest number of certified buildings is found in Mazowieckie Voivodeship, with a share of just over 39% (Figure 18). It is worth noting that this share has been decreasing by about 2.5% per year since 2020. On the other hand, the largest increase in the share was recorded in the Łódzkie Voivodeship - by about 1.4%.

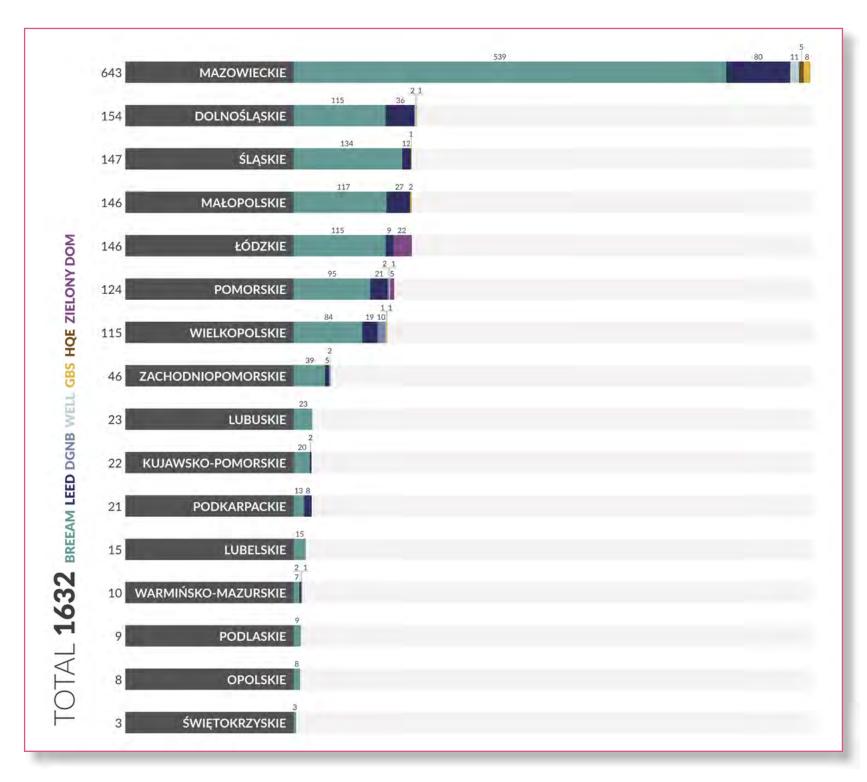


Figure 18 Certified buildings by location



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