



RESEARCH & CONSULTING

October 2021

IPAF Powered Access Rental Market Report 2021

GLOBAL REPORT

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IPAF has been working with Ducker to create these exclusive industry reports since 2009

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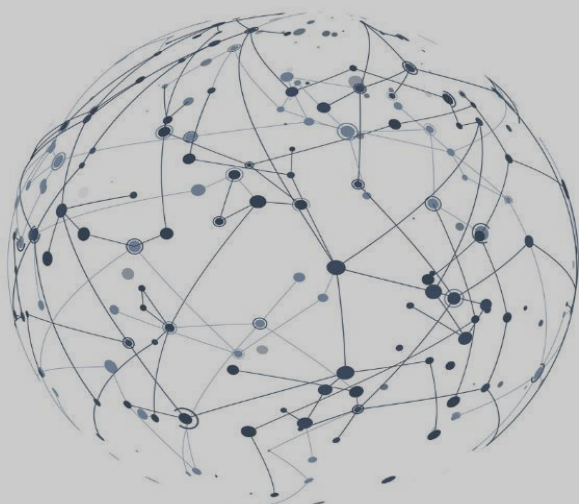
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CONTENTS

Foreword	4
Executive summary	12
Europe information	21
North America information	51
China focus	74





FOREWORD
IPAF Powered Access Rental Market
Report 2021 – *GLOBAL REPORT*

- Ducker provides unrivalled market research and executive advisory services based on decades of experience supporting the strategic decisions of more than 700 companies. Client executives benefit from the firm's broad expertise and geographic reach, robust cloud-based technology platforms, expanded insight into customer behaviour, award-winning data and analyst insights spanning the B2B, healthcare, consumer, and private equity industries.
- Ducker has been working with IPAF to create these exclusive industry reports since 2009, making this the 12th year of our award-winning collaboration. Ducker benefits from solid industry experience and a highly international team with the ability to approach and study global markets at a local level:
 - Product and industry expertise: experience in the MEWP and equipment rental markets through several projects covering access equipment and other types of construction machinery at all levels of the value chain including rental as well as distribution and contracting.
 - International approach applied locally: with a team of permanent native consultants working out of offices that reach across the US, Europe and Asia, Ducker prides itself on the fact that all fieldwork is completed in the respondent's native language by in-house consultants.
 - Methodological expertise: on-going involvement in strategic consulting within areas such as market sizing and segmentation, distribution structure, competitive positioning, the voice of the customer or market opportunity and new product entry assessments for a variety of products within the global construction and transportation industries among others.
 - Quality charter: Ducker works to the guidelines of the ESOMAR ethics standards.
- More information on Ducker can be found at www.Ducker.com

Foreword – objectives

This study assesses the MEWP (Mobile Elevating Work Platform) rental market for the US and Europe over a 12-year period.

- The study covers the time period 2008-2022, with a particular focus on 2020.
- Main objectives:
 - 2020 MEWP rental market value and fleet size.
 - Trends and dynamics (2008-2022).
 - Operational indicators (investment, age of fleet, application).
 - In addition to the primary market value and fleet-size objective, fleet mix is included to ensure that the value is anchored in reality. Moreover, fleet information is typically more readily available than rental revenue. This has allowed for cross-checks, revenue-per-unit ratios and the optimisation of secondary sources.
 - Estimated size of the 2020 MEWP rental fleet worldwide, with a breakdown by region and by machine type (including the estimated share of vehicle mounted platforms held by rental companies owning self-propelled fleets).
- Additional information:
 - Ranking of construction and non-construction sub-sectors in the MEWP rental revenue.
 - Return on investment/average payback period by equipment type.
 - Utilisation rates by equipment type (booms vs scissors).
- The current study does not examine rental company profitability.
- All interviews were conducted between May and June of 2021, which has allowed for primary data collection on the full previous year, thus providing for more specifically targeted and up-to-date information than would have been available from any statistical sources.

- The current study focuses on powered access equipment owned by rental fleets, ie mobile elevating work platforms (MEWPs), formerly known as aerial work platforms (AWPs). It includes the full range of powered access equipment (all sizes and types) except mast climbing work platforms (MCWPs) and hoists.
- Included are: All booms, scissor lifts and vertical masts.
 - Both articulated and straight telescopic booms.
 - Self-propelled as well as push-around, towable and vehicle-mounted.
- Excluded: Low-level access equipment (<10ft / 3m high), telescopic material handlers, forklifts, cranes, MCWPs and equipment owned by non-rental companies.

- The present study focuses on mobile elevating work platforms (MEWPs). It includes the full range (all sizes and types) of powered access equipment, except for mast-climbing work platforms (MCWPs) and hoists.
- Included are powered access equipment, all booms, scissor lifts and vertical masts:
 - Both articulated and straight telescopic booms.
 - Self-propelled as well as push-around, towable and vehicle-mounted.
- Excluded are: low-level equipment (<3m high), telescopic material handlers, forklifts, cranes, MCWPs, hoists and equipment owned by non-rental companies.
- The European part of the study comprises the following ten countries:
 - Denmark (DK)
 - Finland (FI)
 - France (FR)
 - Germany (DE)
 - Italy (IT)
 - Netherlands (NL)
 - Norway (NO)
 - Spain (ES)
 - Sweden (SE)
 - United Kingdom (UK)

These represent 85% of the European* market in value.



* Defined as 27 EU countries plus UK, Norway, Switzerland and North Macedonia

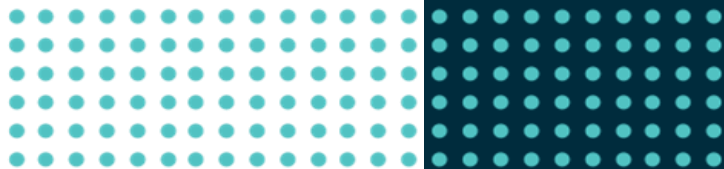
- The main source of information for this study is primary research through telephone interviews. Organisations interviewed for this study include rental companies and other industry experts:
 - Rental companies:
 - Specialist MEWP rental companies: MEWPs account for more than 50% of total rental revenue.
 - Generalist rental companies: MEWP rental revenue accounts for 50% or less of total rental revenue.
 - MEWP manufacturers.
 - National rental associations.
 - Industry experts.
- Secondary data was also gathered to validate major market trends identified.
- Only persons with input in machine selection or management were qualified as respondents. Recurrent respondent job functions include in particular Owner, Sales and Technical Manager, Purchasing Manager, Fleet Manager, Branch Manager or Operations Manager.
- Ducker and IPAF would like to thank all industry representatives who have been available for interviews and whose kind assistance made it possible to conduct this research.

- MEWP rental revenue:
 - Includes for example: machine rental rates, machine repair, support (eg fuel services), transportation/delivery, training, damage waiver, operator charges.
 - Used equipment sales are excluded from the MEWP rental revenues reported.
- Re-rental:
 - Rental by one rental company from another rental company.
- Utilisation rate:
 - Physical number of machines out on rent as a percentage of the total number in fleet at any given time.
- Average age of fleet:
 - Overall average age of the fleet in December 2018, including machines that underwent refurbishment/remanufacturing.
- Rental rate:
 - Corresponds more to net prices than list prices. Directly linked to the rental revenue.
 - The dollar amount the customer agrees to pay for possession and use of a machine.

- Exchange rates:
 - The currency exchange rates used for countries outside the eurozone are as below (average annual 2018 exchange rates). The same rate has been used throughout the time period in order to eliminate variation in growth rates due to exchange rates rather than to the actual MEWP rental market.

	Currency Unit	Converter to Euro
UK	£ 1	1.125
Denmark	DKK 1	0.134
Norway	NOK 1	0.093
Sweden	SEK 1	0.095
US	US\$ 1	0.877

	Currency Unit	Converter to Euro	Converter to USD
RDC	¥ 1	0.127	0.145

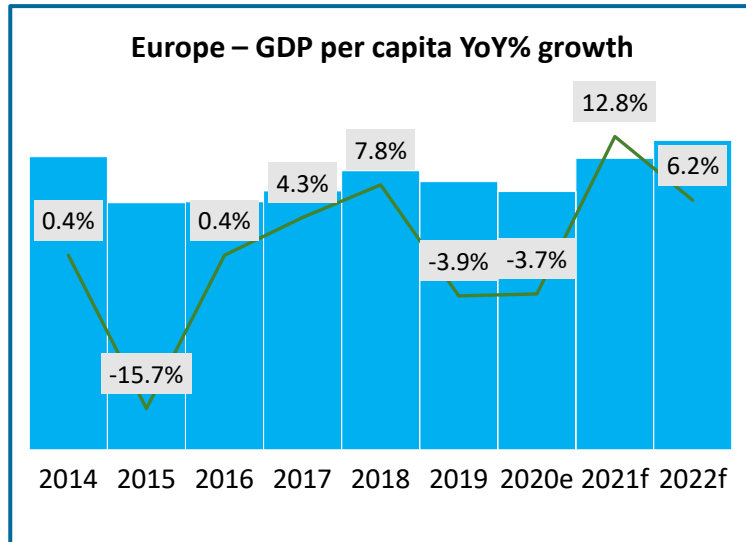


EXECUTIVE SUMMARY
IPAF Powered Access Rental Market
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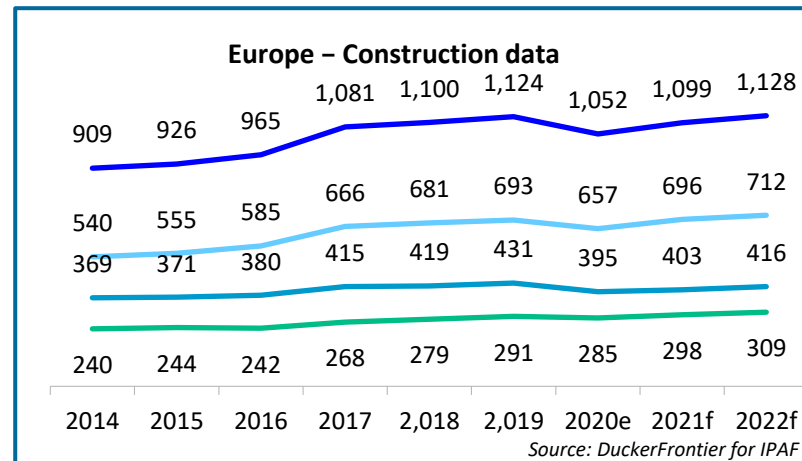
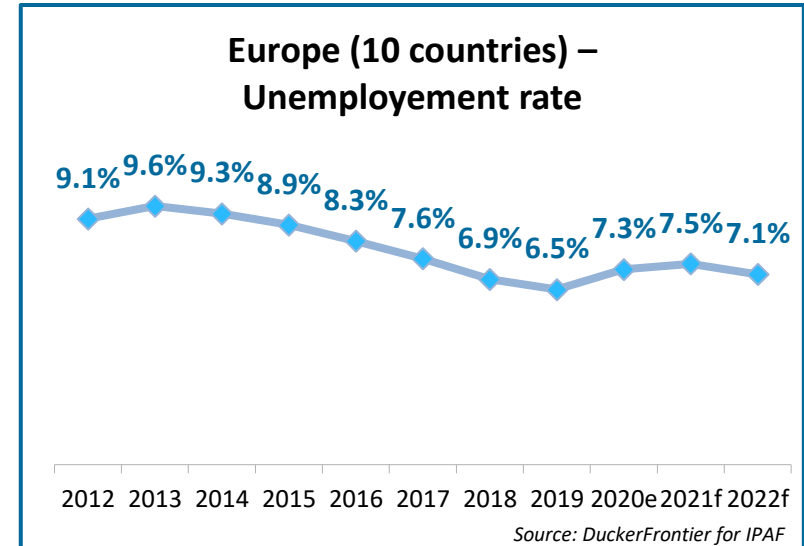
Executive summary – Europe

Macro-economic outlooks were generally negative in 2020 in Europe. Both GDP and construction outlooks are positive for 2021 and beyond.

Compound Annual Growth Rate (CAGR) 20-22 = 9.43%



Source: FrontierView – Sept 2021



Compound Annual Growth Rate (CAGR) (2018-2020)

- Residential construction: 4.12%
- Non-res. constr. : 2.65%
- Total construction : 3.57%

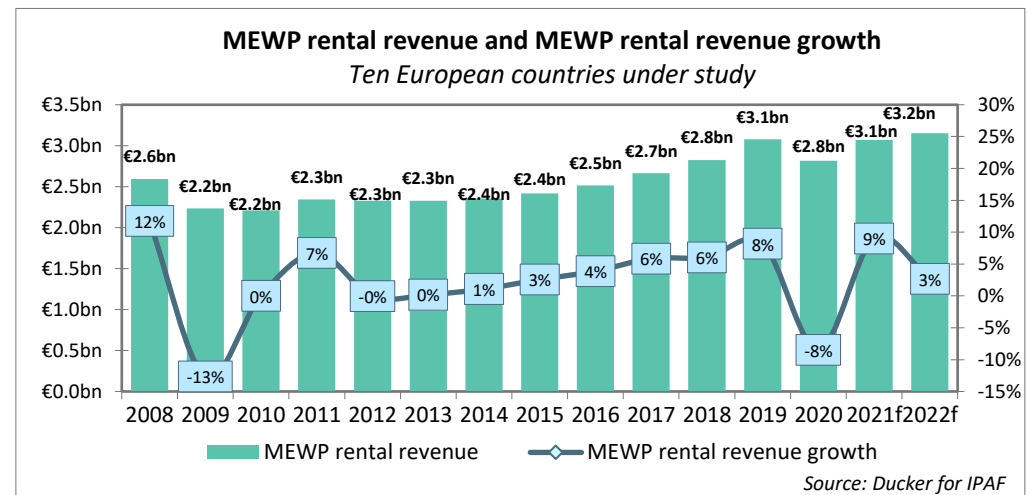
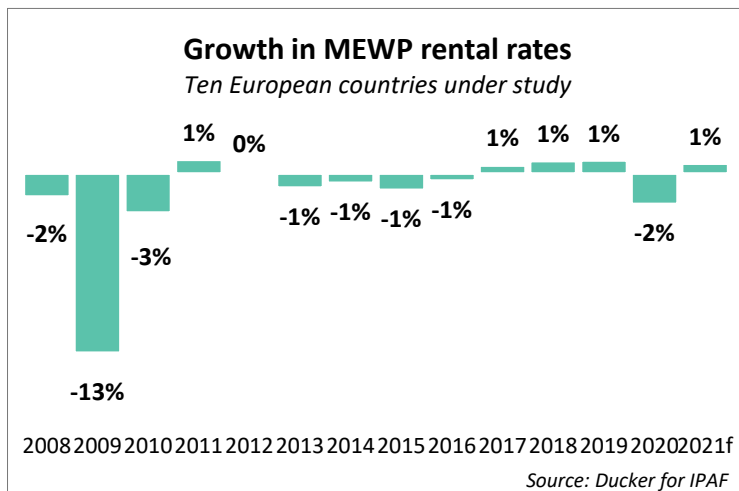
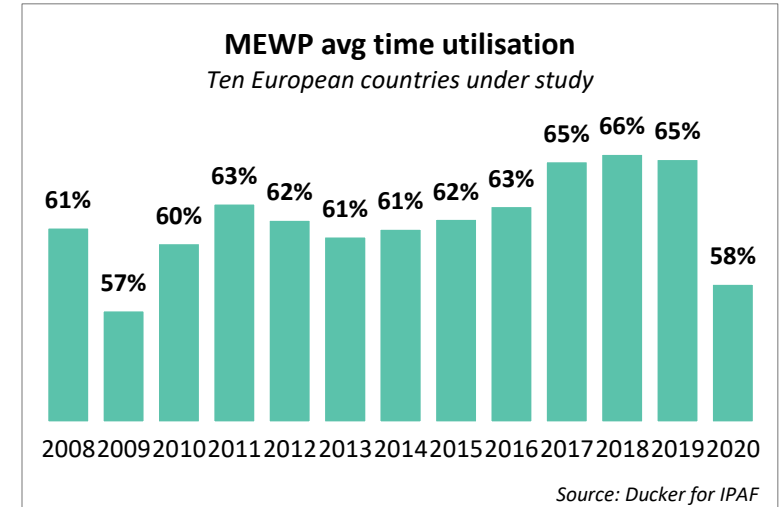
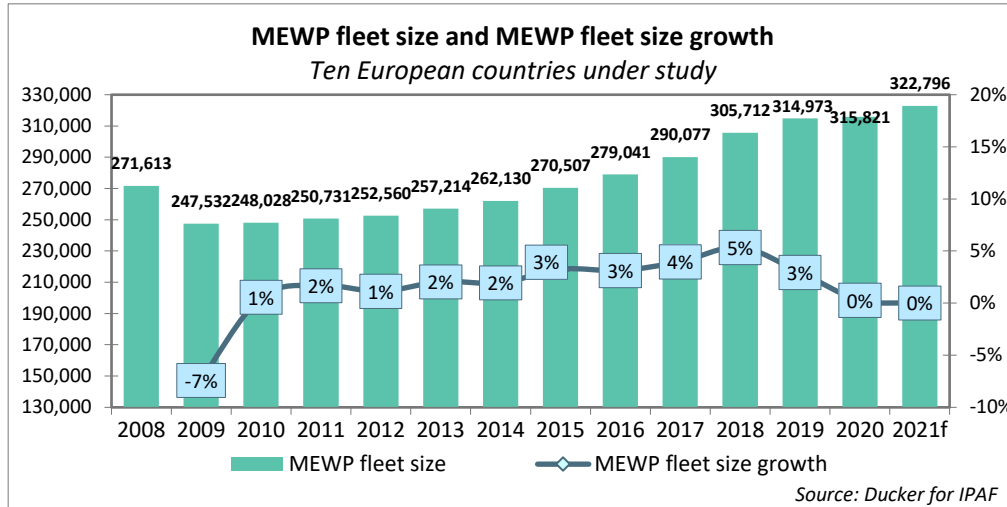
- Residential construction
- Non-residential construction
- Total construction
- Civil engineering / Major infrastructure

Construction pipeline (billions euros) based on Euroconstruct 2021 figures.

- The European MEWP rental market as a whole shrunk in 2020, after several years of continuous growth. It is mainly due to the pandemic and its consequences, such as the lockdowns in many of the countries under study.
- In 2020, the European rental market revenue was equal to €2.849 billion. This represents a drop of 8% compared to 2019, the main factor being the drop in activity for both construction and non-construction sectors during the pandemic.
- Rental companies kept their fleet relatively stable, being cautious about their investment in a time of global uncertainty, in both 2020 and 2021. It represents a fleet size of approximately 316,000 units.
- Utilisation rate decreased significantly (-7.2%) in 2020, due to the lack of activity during lockdowns. Some countries such as UK, Spain, France and Italy were particularly hit, others such as the Netherlands managed to reduce it slightly.
- As opposed to previous years, rental companies often needed to lower their rental rates, or at the best keeping at their 2019 levels. Rental rates particularly decreased in France and Spain, but also slightly in Germany and the Netherlands.
- The level of investment dropped massively, as rental companies needed to keep their cash and wait for a return of activity, which led to less replacement and increase in fleet size.
- The market outlook for 2021 is positive overall, with a reduced impact of the pandemic on the construction and non-construction sectors. Rental companies are still reluctant to invest, and will likely wait until 2022 to invest again.

Executive summary – Europe

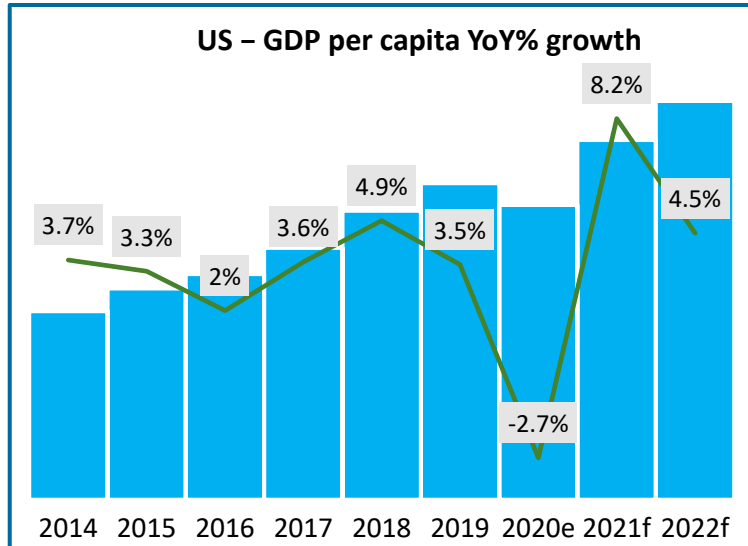
The MEWP rental market situation at end 2020



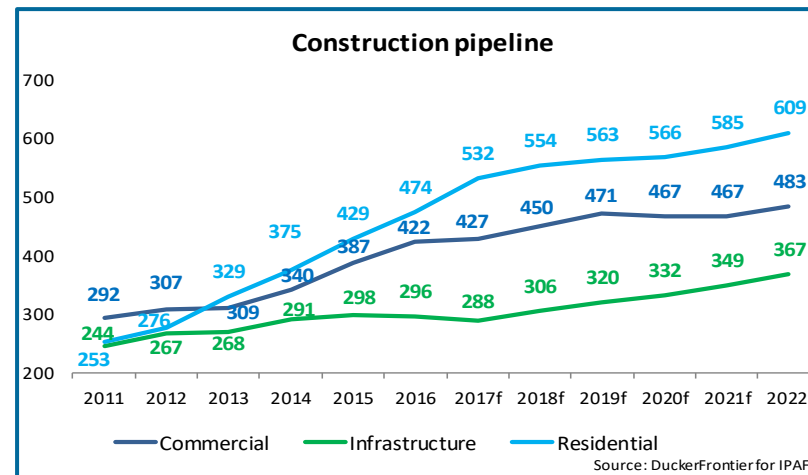
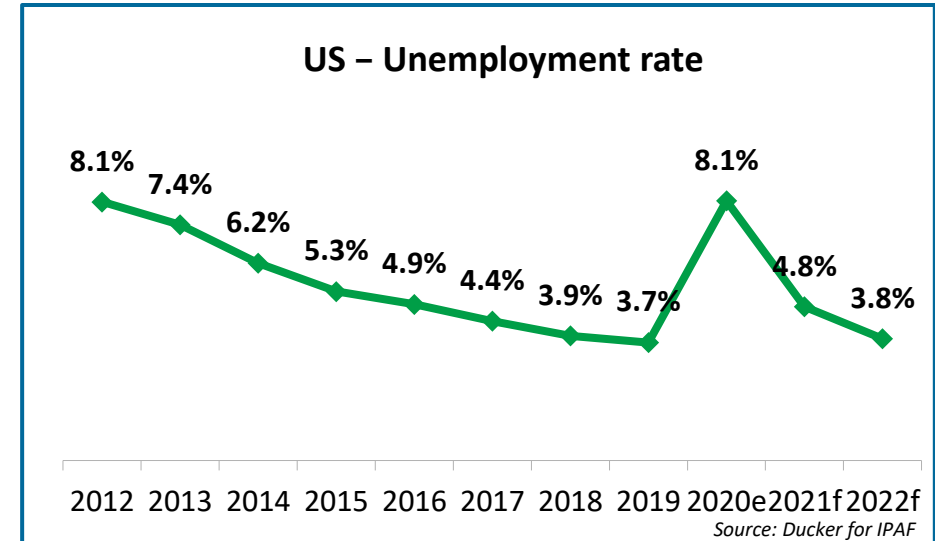
Executive summary – USA

Macro-economic outlooks were generally negative in 2020 in the US. Both GDP and construction outlooks are in positive for 2021 and further ahead.

Compound Annual Growth Rate (CAGR) 20-22 = 6.33%



Source: FrontierView – Sept 2021



Source: FMI Construction Outlook.

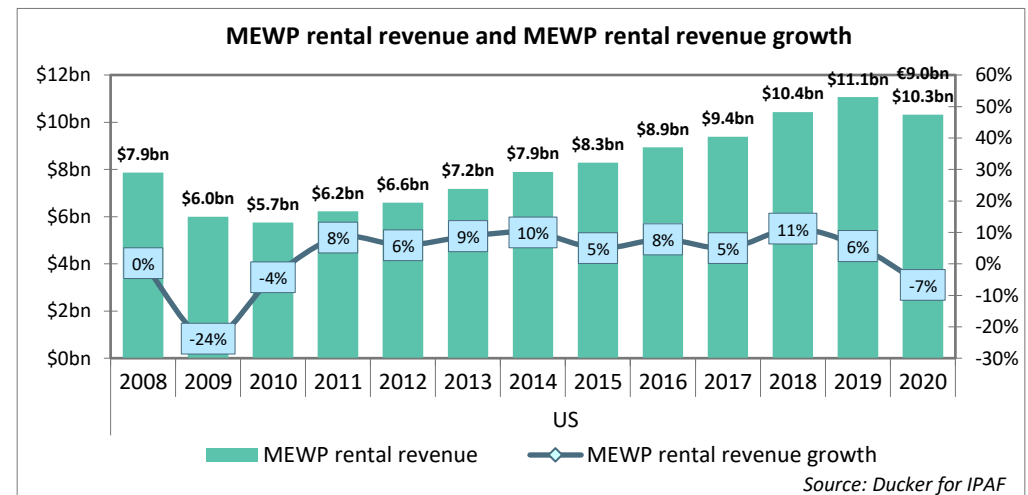
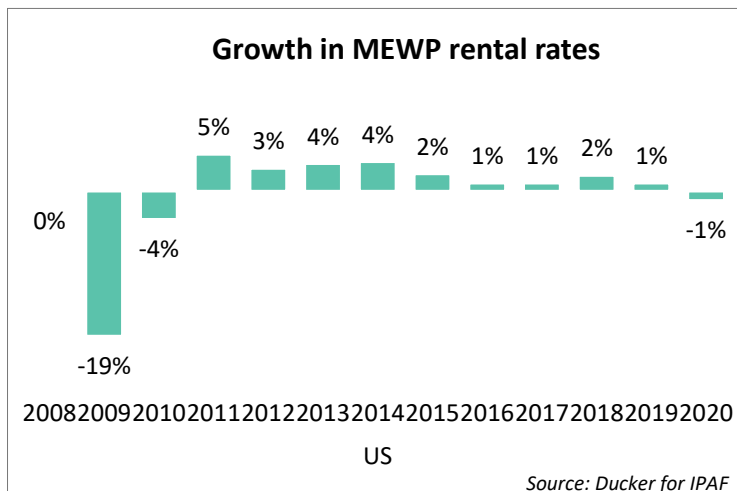
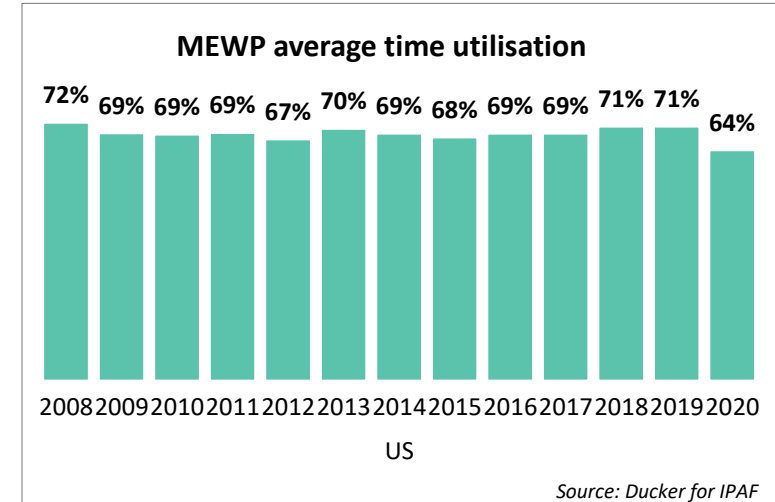
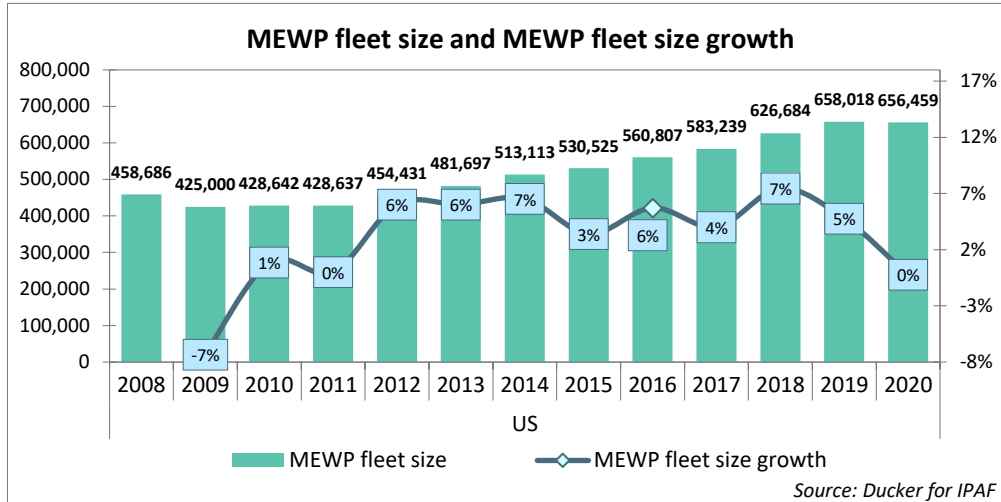
Millions of current dollars

Fourth quarter 2021 forecasts

- MEWP rental revenue decreased by 7% in 2020, being greatly impacted by the pandemic particularly during Q2 during the height of national lock downs and restrictions. Q3 and Q4 did see a fairly robust if patchy recovery.
- MEWP fleet size in the US remained stable in 2020, as rental companies reduced their investment and tried to keep utilisation rates from falling too drastically. There was some investment in Q1 of 2020, offset by the rest of the year.
- Average utilisation rate dropped by 7% and rental rates by 1.2%, both caused by the pandemic initially and then supply chain issues and uneven reopening afterwards.
- Although the activity in both construction and non-construction look better in 2021, some rental companies are still reluctant to invest massively. The uncertainty around the pandemic and reduced machine availability or increased lead times from some manufacturers are some of the obstacles to market recovery and growth in 2021.

Executive summary – USA

MEWP rental market situation at end 2020

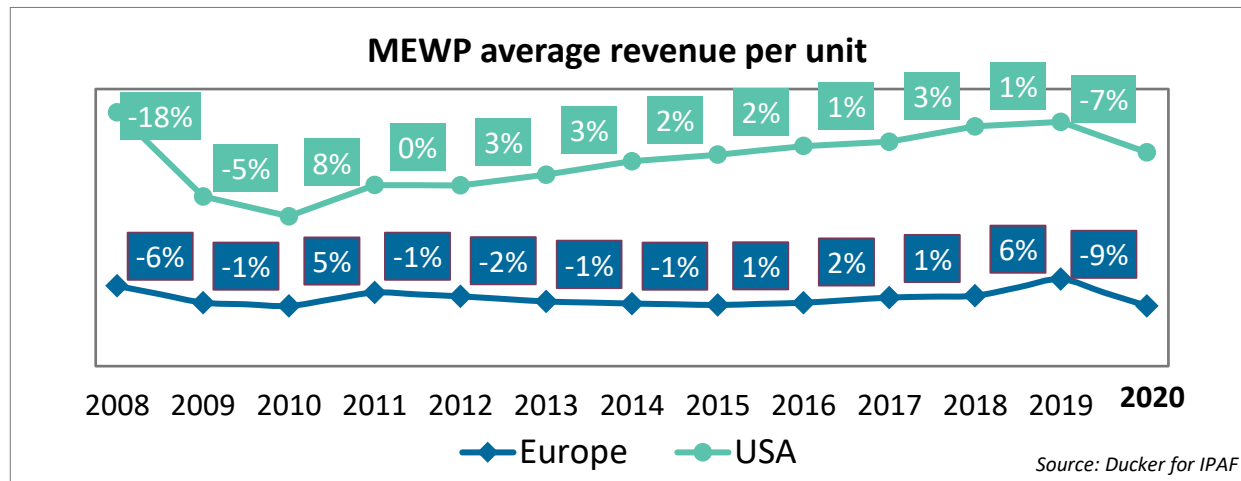


Executive summary – Europe v USA

In 2020, both USA and Europe MEWPs rental markets decreased, due to the pandemic.

Region	2020 revenue growth	2020 revenue	2020 fleet size growth	2020 fleet size	Utilisation rate growth	Rental rate growth
Europe	-8%	€2.8/ \$3.2bn	+ 0%	315,821	- 7 pts	-2 %
USA	-7%	\$10.3 / €9.0bn	+ 0%	656,459	-7 pts	-1.2%

- Both the European and American markets decreased in 2020, by respectively 8% and 7%, after a continuous growth these past five years.
- Average revenue per unit also dropped, by 9% in Europe and 7% in the US. However, both regions are expected to experience growth in average revenue per unit in 2021.



Executive summary – Europe v USA

Fleet size per region and type of equipment in 2020.

North America

Articulated booms	136,245
Straight booms	149,371
Scissors	413,723
Others	34,120
Total	733,459

Latin America*

Articulated booms	26,986
Straight booms	4,032
Scissors	23,860
Others	4,772
Total	59,650

*Includes Mexico

EAME

Articulated booms	90,096
Straight booms	38,364
Scissors	163,304
Others	42,467
Total	340,329

Overall Europe (27 EU countries + UK)
accounts for 94% of total EAME fleet

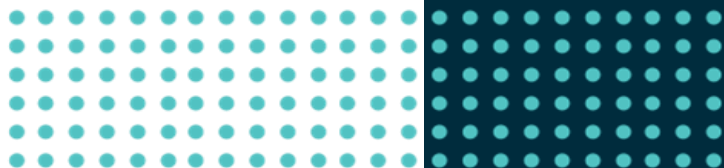
ASIA - PAC

Articulated booms	525,687
Straight booms	298,218
Scissors	891,433
Others	157,571
Total	1,651,689

Included are powered access booms, scissor lifts and vertical masts;
Excluded: Low-level access equipment (<10ft/3m high), telescopic material handlers, forklifts, cranes, Mast-Climbing Work Platforms (MCWPs).

Others include: Vertical lifts, vertical masts, vehicle-mounted booms owned by rental companies with self-propelled fleets.

The number of units in 2018 was revised due to the identification of a higher number of used equipment than previously estimated present on the Spanish MEWP rental market. Other linked indicators have been revised too



EUROPE INFORMATION
IPAF Powered Access Rental Market
Report 2021

Executive summary – Europe

Almost all of the ten countries under study experienced a drop in revenue during 2020, owing of course to the impact of the pandemic. Only Denmark seemed to maintain activity to a degree that meant a fall of less than 1%.

Region	Market situation	GDP	Overall construction	MEWP Rental Market	Key Indicator
UK	Overall drop in GDP and construction	↓ -5%	↓ -13%	↓ -10%	Falls in all indicators
Denmark	Stable economy with uncertainty	↑ 1%	↑ 1%	↓ 0%	Stable rental and utilisation rates. Fleet stable.
Norway	Stable construction but strong drop in GDP	↓ -11%	↓ 0%	↓ -6%	Rental rates increase and fleet expansion.
Sweden	Limited outlooks.	↓ 0%	↓ 0%	↓ -2%	All indicators dropping slightly.
Finland	Moderate growth. Limited outlooks.	↑ 1%	↓ 0%	↓ -5%	All indicators dropping slightly.
Italy	Significant drop in GDP and construction	↓ -6%	↓ -7%	↓ -12%	Rental and utilisation rates drop, stable fleet
France	Significant drop in GDP and construction	↓ -5%	↓ -13%	↓ -12%	Rental and utilisation rates drop, stable fleet
Netherlands	Relative drop in construction, stable economy	↓ -0%	↓ -4%	↓ -5%	Fall in utilisation rates, stable fleet and rental rates
Germany	Relative drop in GDP and construction	↓ -2%	↓ -1%	↓ -4%	Fall in utilisation rates, stable fleet and rental rates
Spain	Significant drop in GDP and construction	↓ -9%	↓ -11%	↓ -13%	Rental and utilisation rates drop, fleet growing slightly
Europe (Ten countries)	Overall drop in revenue. Positive outlooks for 2021				Stable fleet, drop in other indicators



MARKET SIZE 2008-2022
IPAF Powered Access Rental Market
Report 2021 – EUROPE

Market size 2020 – rental market value

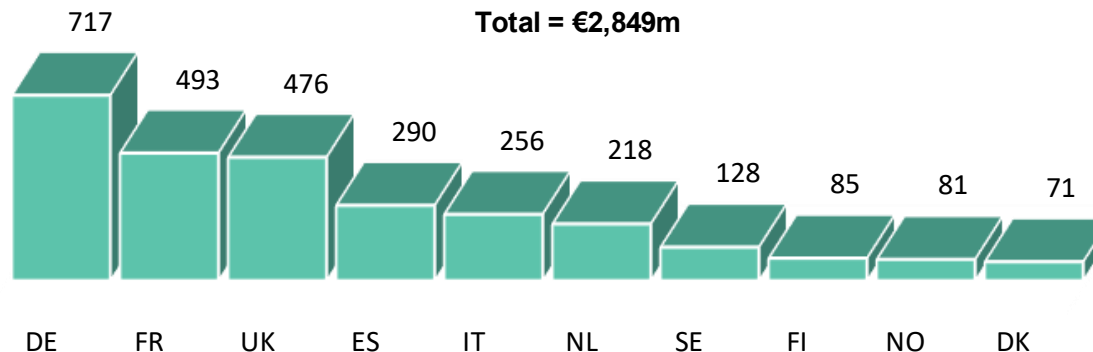
The MEWP rental market (ten European countries under study) was estimated at a total value of approximately €2.8bn in 2020.

- Three markets dominate the European MEWP rental market. Germany, the UK and France account for 64% of revenue generated by MEWP rental activity in the ten countries under study.
- Market values decreased in almost all countries in 2020.

- In 2020, the market value decreased drastically compared to 2019.
- The main factor was the impact of the restrictions and effective lockdown in the majority of the countries under study.
- Rental revenue as a percentage of total company revenue remained stable, however.
- All of the ten European markets under study decreased in 2020, sometimes by double digits, such as the UK (-10%). Sweden is the market where market value experienced the smallest decrease (-2%).

MEWP rental market (€m) – 2020

Ten European countries under study



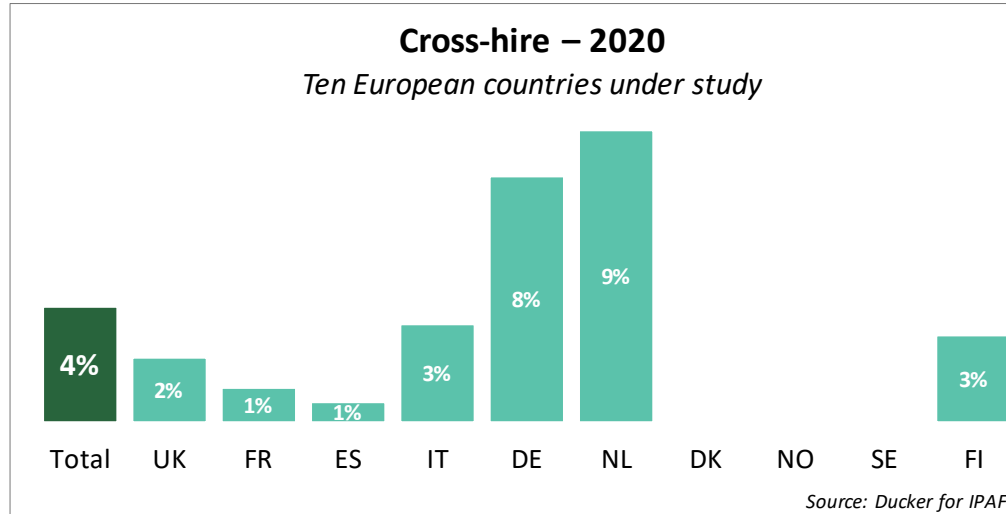
Source: Ducker for IPAF

2020	Total	UK	FR	ES	IT	DE	NL	DK	NO	SE	FI
Rental Revenue as % of Total Company Revenue	57%	53%	65%	52%	51%	47%	66%	72%	73%	75%	75%
MEWP Revenue as % of Total Rental Revenue	71%	96%	45%	68%	88%	76%	83%	73%	64%	35%	30%
MEWP Rental Revenue as % of Total Company Revenue	37%	51%	29%	36%	45%	36%	55%	53%	46%	26%	23%

Market size 2020 – cross-hire

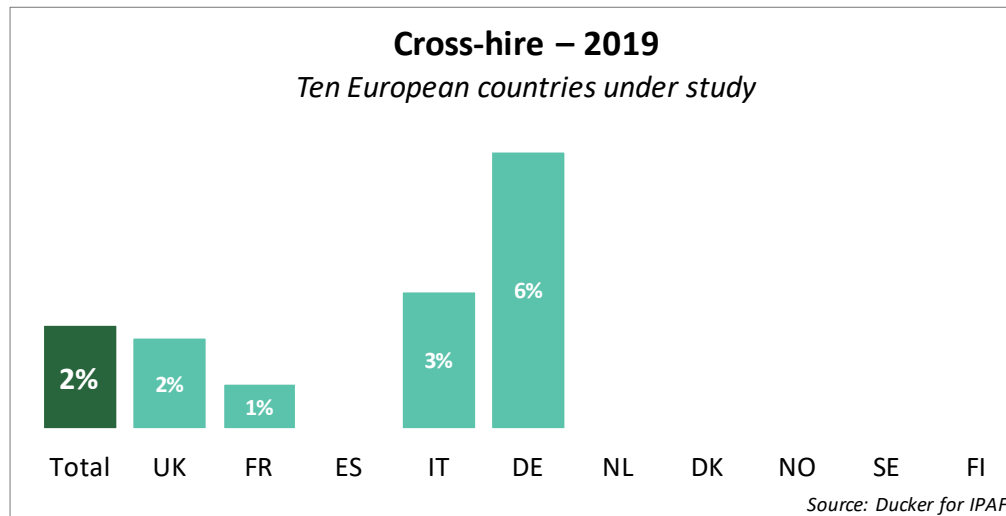
The level of cross-hire decreased in 2020 across Europe as a whole, but in some countries, including the Netherlands (9%) and Finland (3%) it increased, as rental companies turned to cross-hire to fulfil specific demand from customers.

All re-rental amounts have been eliminated from totals expressed in this report



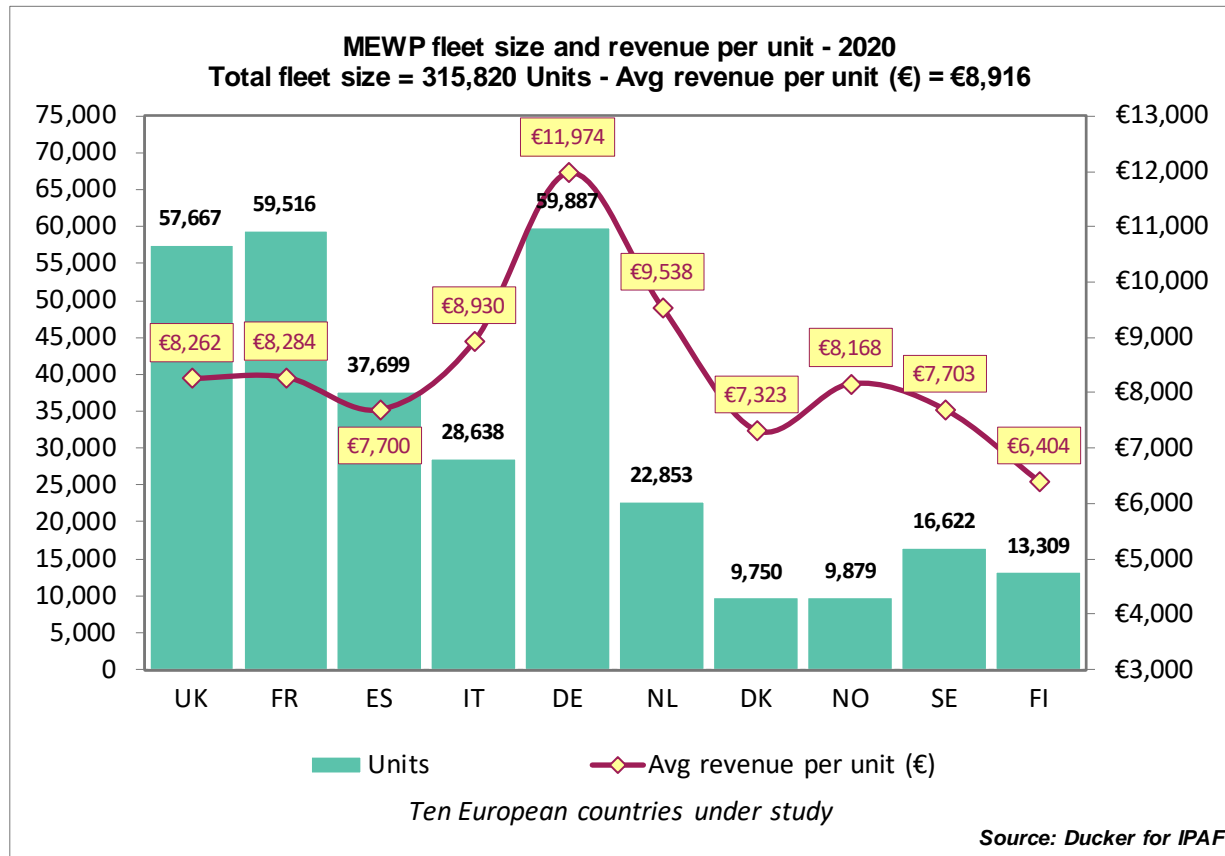
- As in previous years, cross-hire is particularly high in Germany and Italy. In 2020, cross-hire grew by 9% in the Netherlands, and by 3% in Finland.
- Cross-hire remained negligible in the Nordics (except for Finland) and in France and Spain.

Cross-hire = Rental by one company from another



Market size 2020 – market size in units

MEWP fleet size is estimated at approximately 316,000 units in the ten European countries under study. Germany has marginally the largest fleet, followed by France and the UK, all with circa 60,000 MEWPs in their respective fleet.



End-of-year data

- The German MEWP rental fleet is the largest, followed closely by the French and UK fleets. Fleet size in each of these three countries is estimated at around 60,000 units.
- Average revenue per unit decreased in 2021 and is now around €8,700 per unit.
- Germany has the highest revenue per unit, with an average of almost €12,000 per unit.
- Average revenue per unit remains lowest in Spain, where it is around €5,490.
- Average MEWP rental revenue per unit is below the European average in all of the four Nordic countries under study.

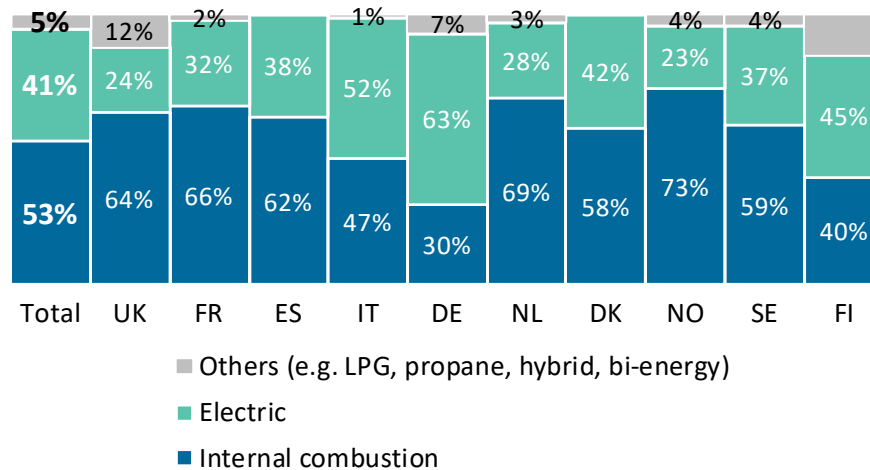
Market size 2020 – power sources

The European MEWP rental market continues to shift towards greener power sources, but the transition was slowed to some extent by the impact of the pandemic and the drive to stabilise fleets during 2020.

- Electric scissors represent the majority of the fleet in all countries, and particularly Germany, the Netherlands and Nordic countries. In the other countries, the transition towards electric scissors continues, but there is still a significant use of diesel scissors and booms for outdoor applications.
- The transition towards electric booms is still faced with certain obstacles: A lack of available rough terrain and 20m+ MEWPs and the infrastructure to charge batteries. Most expect to complete the transition in 5-10 years.
- Rental companies are still reluctant to switch to hybrid machines, especially owing to issues around maintenance and utilisation, lukewarm customer demand, and the prohibitive costs involved in buying the machines new.

Booms segmented by power source – 2020

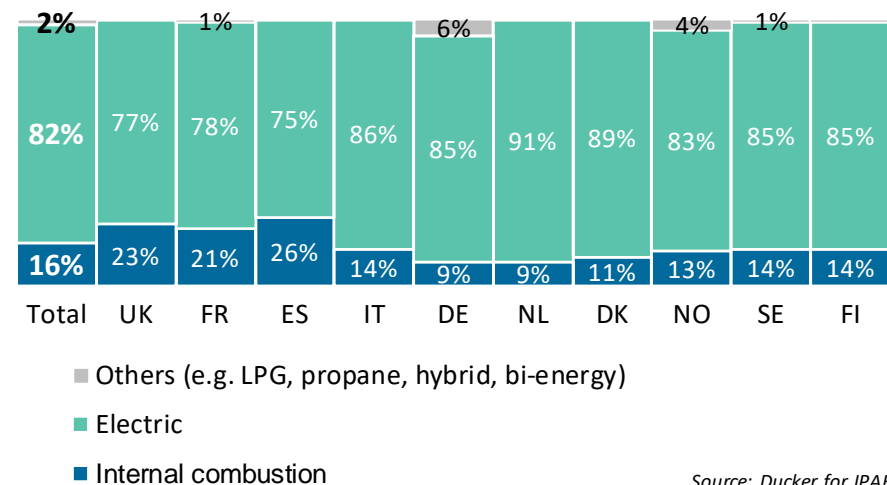
Ten European countries under study



Source: Ducker for IPAF

Scissors segmented by power source – 2020

Ten European countries under study



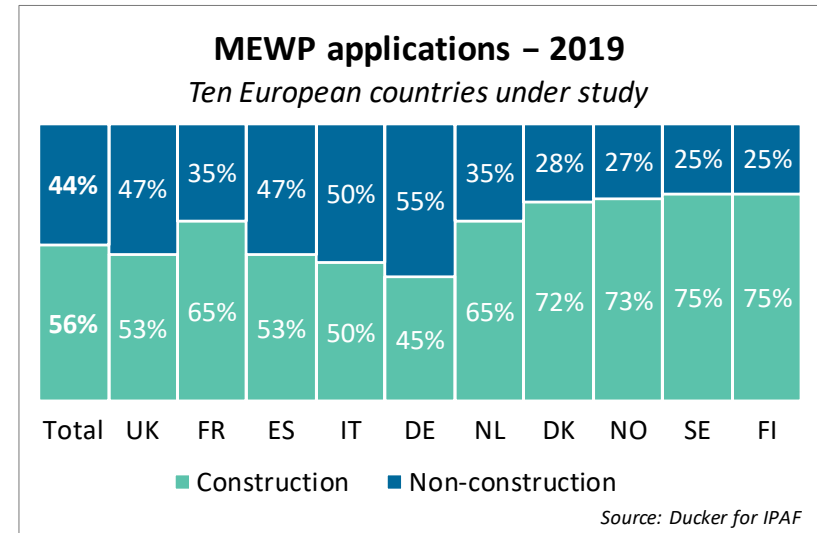
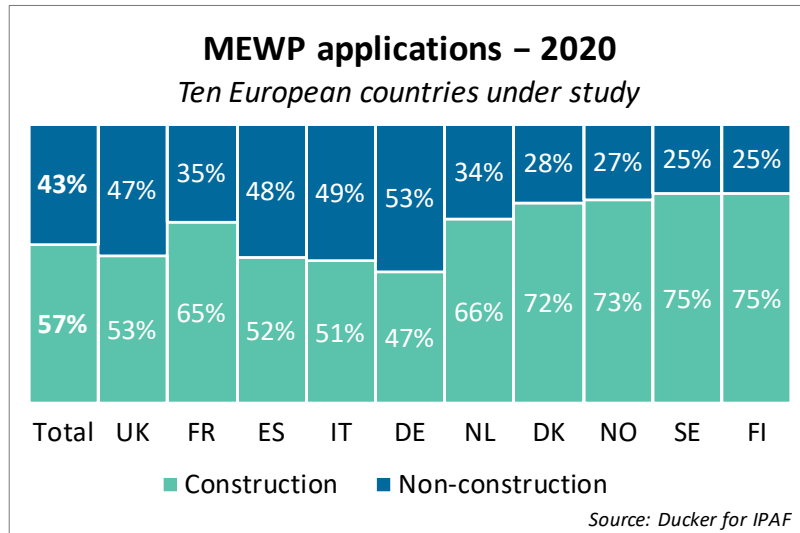
Source: Ducker for IPAF

Percentage of fleet powered by electric vs internal combustion.

Market size 2020 – applications

The overall split between construction and non-construction end-uses remained largely unchanged from 2019 to 2020 when looking at Europe as a whole. Essential infrastructure and construction work and logistics mitigated falls in demand.

- In 2020, both construction and non-construction sectors were hit by the reduced activity during the pandemic.
- In several countries such as Italy, Netherlands or France, some major but not-essential construction projects were put on hold during the pandemic, though these were restarted later in 2020 and contribute to peaking demand owing to the catchup on construction pipeline in 2021 and beyond.



Non-construction includes property and infrastructure maintenance, cleaning, utilities, events.

Construction includes new-build and renovation work, across commercial, residential and infrastructure projects.

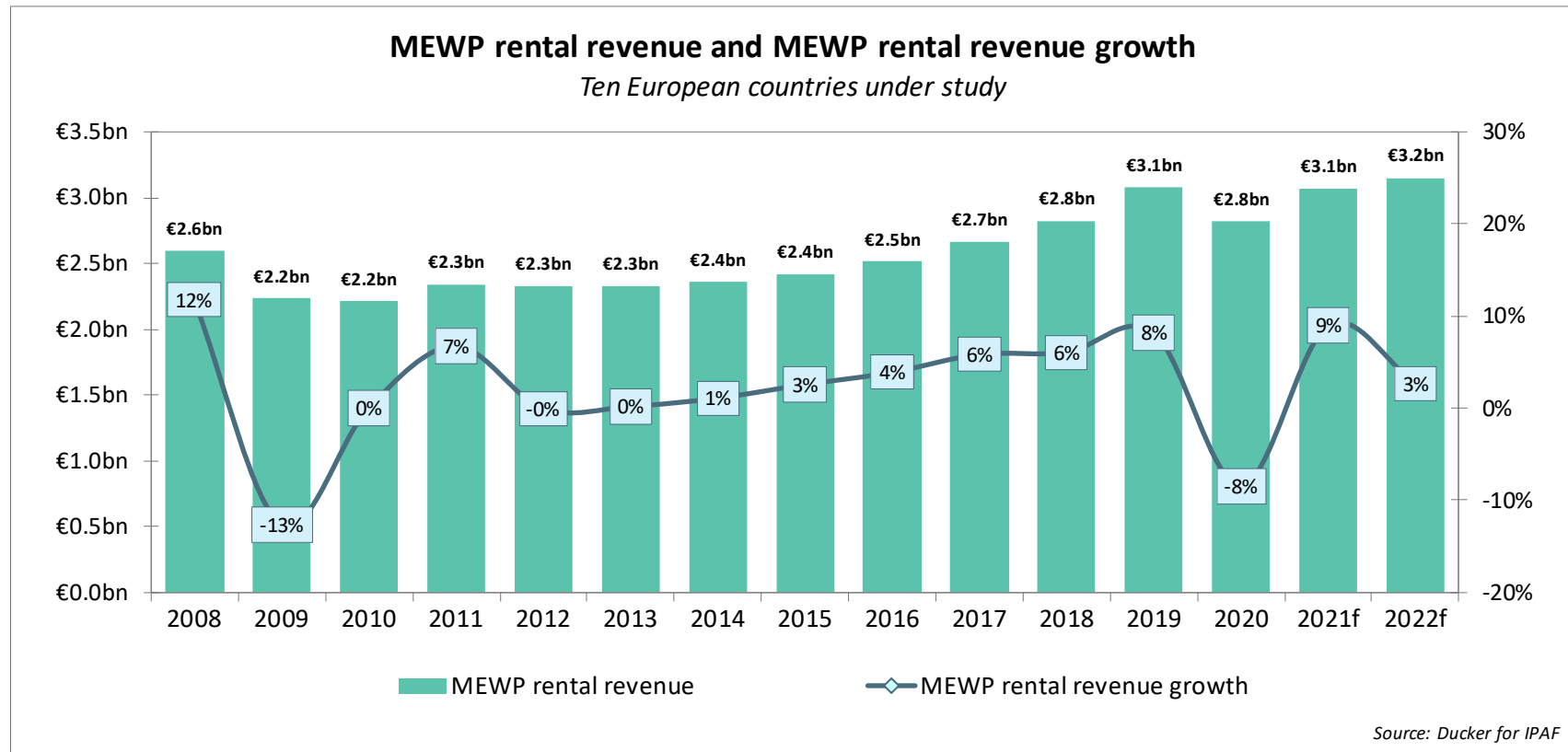


MARKET DYNAMICS 2008-2022
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Market dynamics 2008-2022 – market value growth

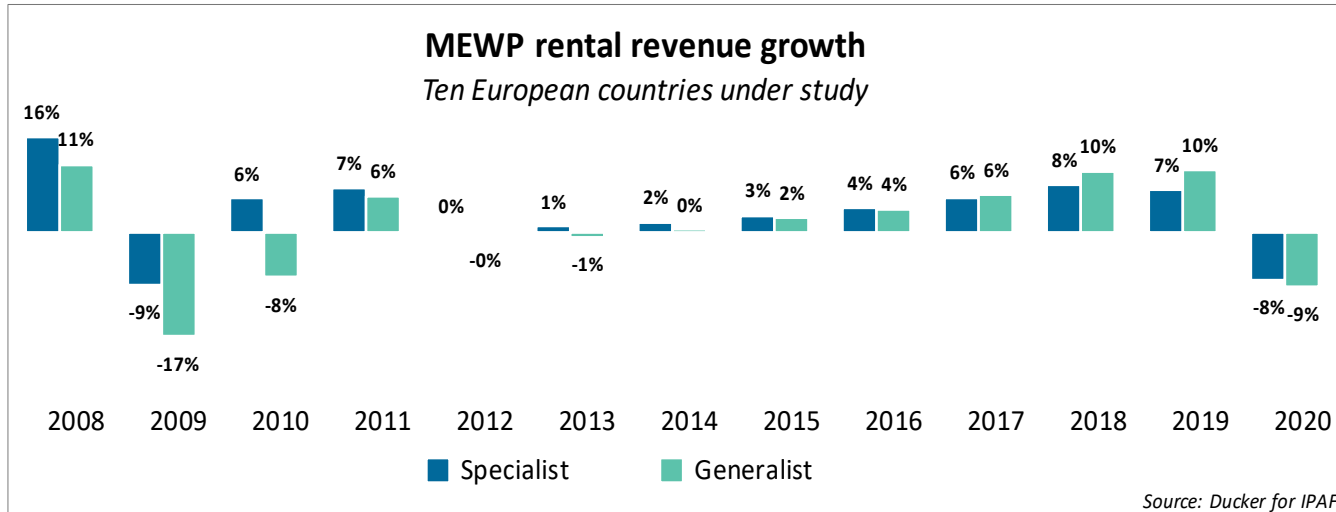
In 2020, European MEWP rental revenue decreased by 8% overall, to stand at a total estimated value of €2.8 billion at the end of the year. This was significant, but less severe than was forecasted in last year's Rental Market Report.

- The overall drop in revenue was less drastic than expected and forecasted in last year's report, but European markets were still hit hard by the pandemic.
- Overall, there is optimism from rental companies for outlooks in 2021 and beyond: Most are expecting a return to 2019 levels of revenue, and in some cases an even higher utilisation, either by the end of 2021 or during 2022.



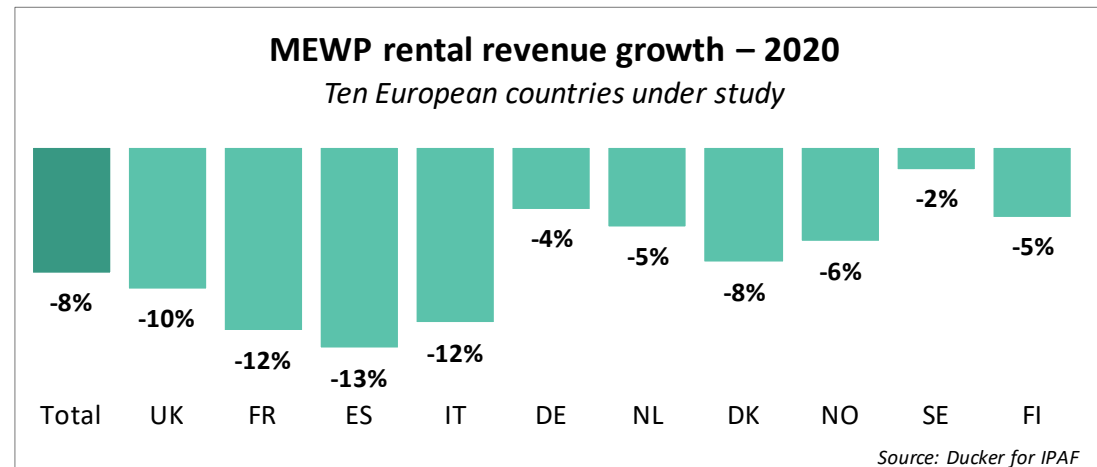
Market dynamics 2008-2022 – by company type

In 2020, all European MEWP rental markets under study decreased significantly, but the downturn varied by country. It seemed generalist rental companies suffered slightly more than specialist MEWP rental companies.



- In 2020, MEWP rental revenue falls were around 1% greater for generalist than for specialist MEWP rental companies.
- Trends are expected to return to normal levels in 2021, with similar growth for generalists and specialists.

- Spain experienced the highest decrease in revenue in 2020 (-13%).
- France, Italy and UK saw double-digit revenue drops, being some of the most impacted markets during 2020.
- The deterioration remained more limited in the Nordic countries, where companies suffered fewer restrictions during the pandemic.

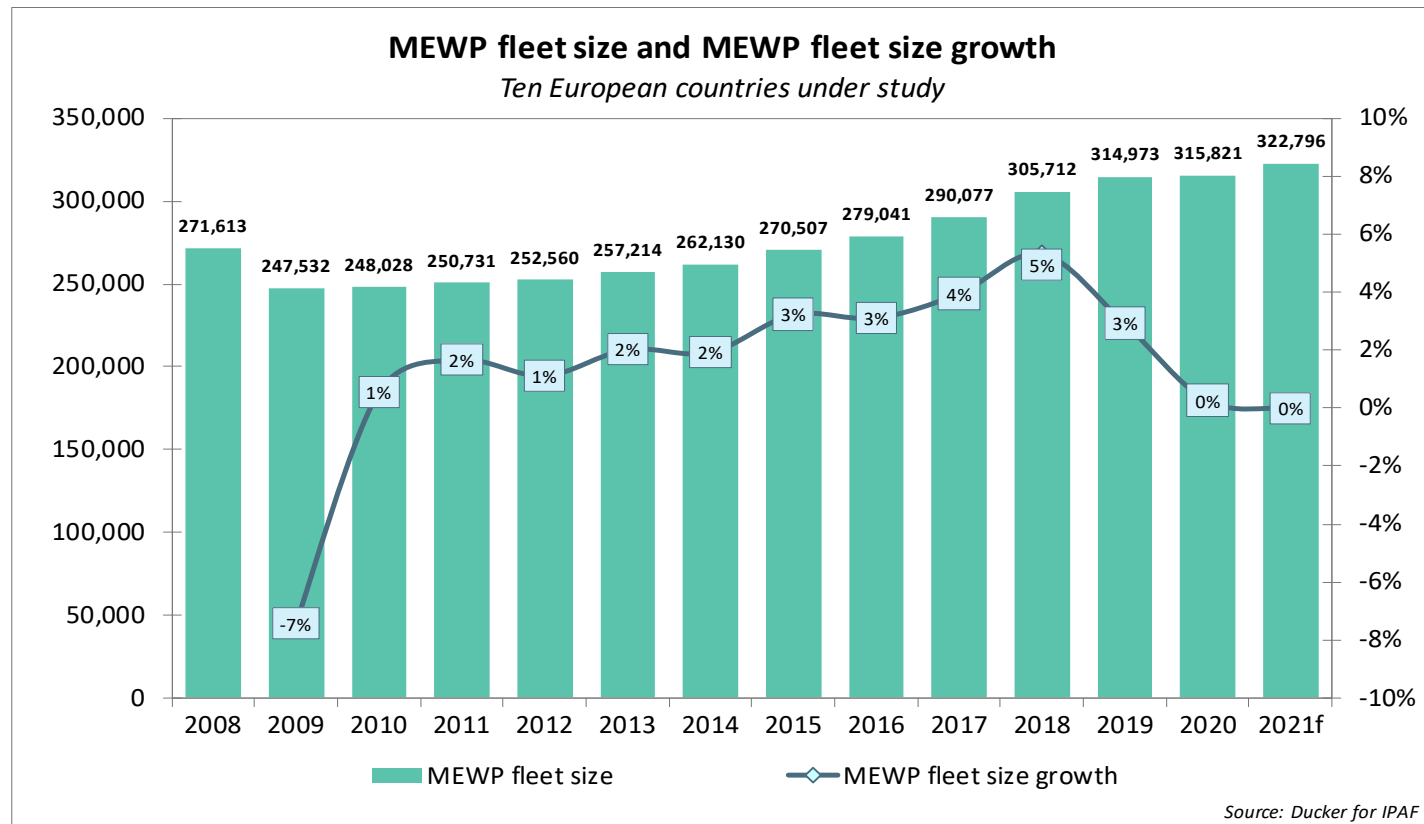


Market dynamics 2008-2022 – market size in units

Contrary to what was anticipated, the overall fleet size did not shrink but remained stable in 2020. Some countries saw minor defleeting (UK, Netherlands), while others (Spain) saw overall fleet size increase slightly.

- After several years of continuous growth, the pandemic put a stop on fleet size increase: Investment was scaled back accordingly as rental companies exhibited financial caution.
- Most of companies decided to keep their fleet in 2020, expecting a quick recovery as the pandemic eased.
- In 2021, fleet size will increase slightly compared to 2020, driven by increased demand and renewed investment.

Included are powered access lifts:
All booms, scissor lifts and vertical masts
Excluded: low-level access equipment (<3m high), telescopic material handlers, forklifts, cranes, MCWPs

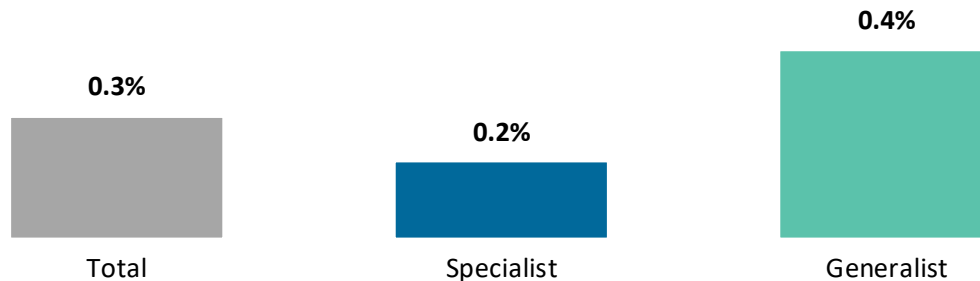


Market dynamics 2008-2022 – market size in units

MEWP rental fleets in all ten countries under study remained relatively stable in 2020, except in the UK and the Netherlands, which saw overall fleet size shrink slightly as older machines were disposed of and not renewed.

MEWP fleet size growth – 2020

Ten European countries under study



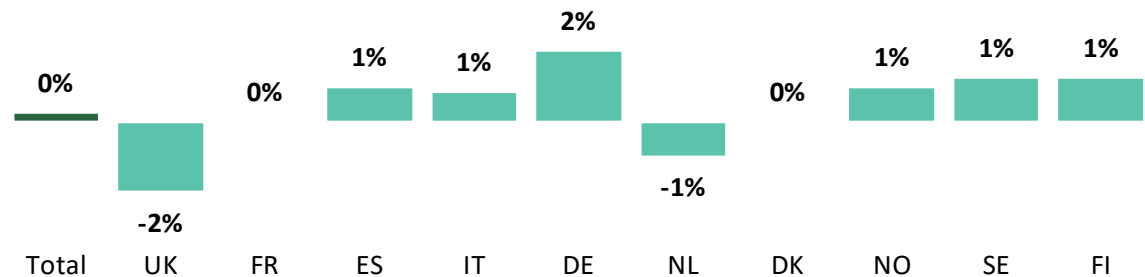
Source: Ducker for IPAF

- In 2020, fleet was kept relatively stable for both specialists and generalists, even though generalists had a slightly higher fleet increase

- Fleet size increased in Italy, Spain and Germany by 1-2%.
- Fleet size remained stable in France and Denmark.
- To avoid a significant drop in utilisation rates, fleets in UK and Netherlands were slightly reduced in 2020.

MEWP fleet size growth – 2020

Ten European countries under study

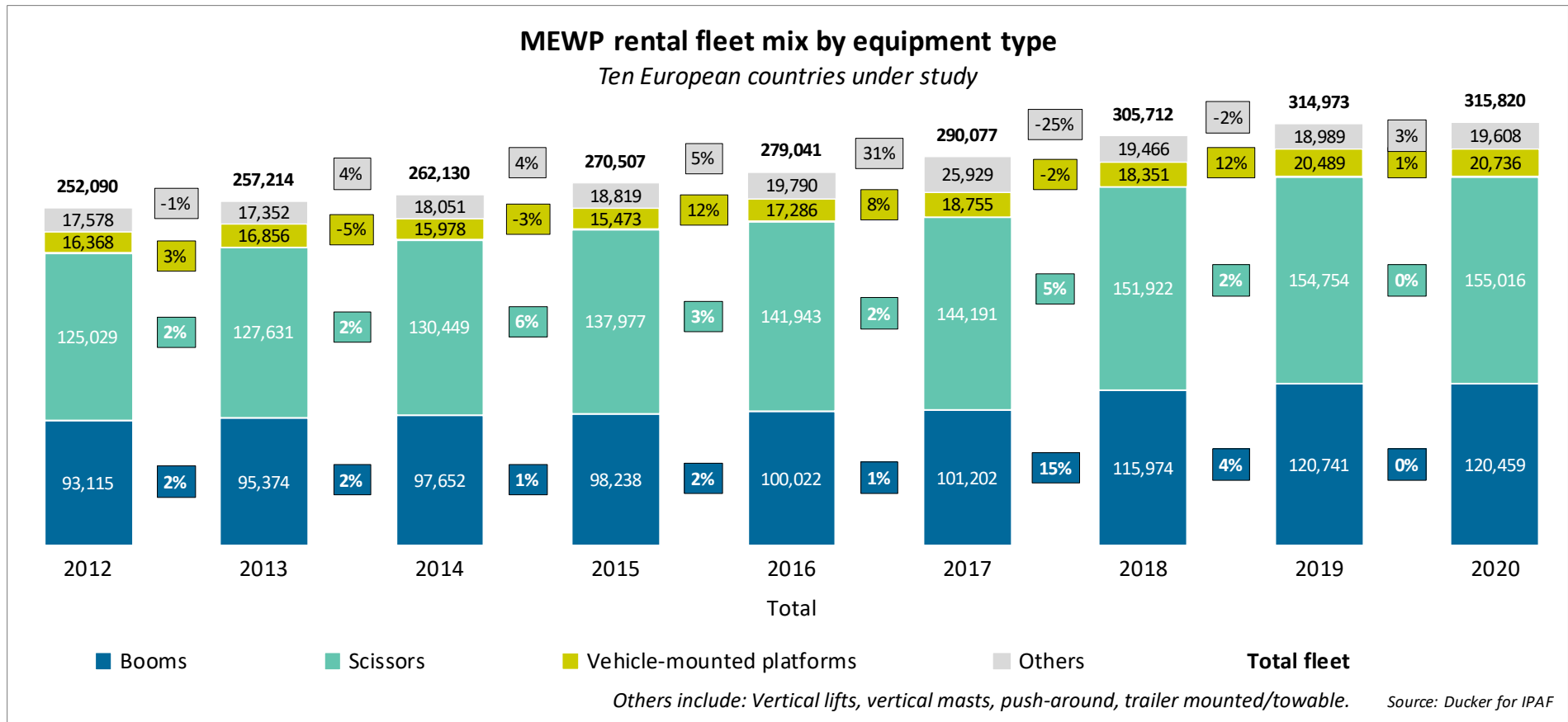


Source: Ducker for IPAF

Market dynamics 2008-2022 – market size in units

Typical European MEWP fleet mix comprises of 50% scissors, 38% booms, 7% vehicle-mounted and 6% other types of equipment

- As long as the fleet size remains stable, the overall fleet mix is not expected to change significantly in 2021.



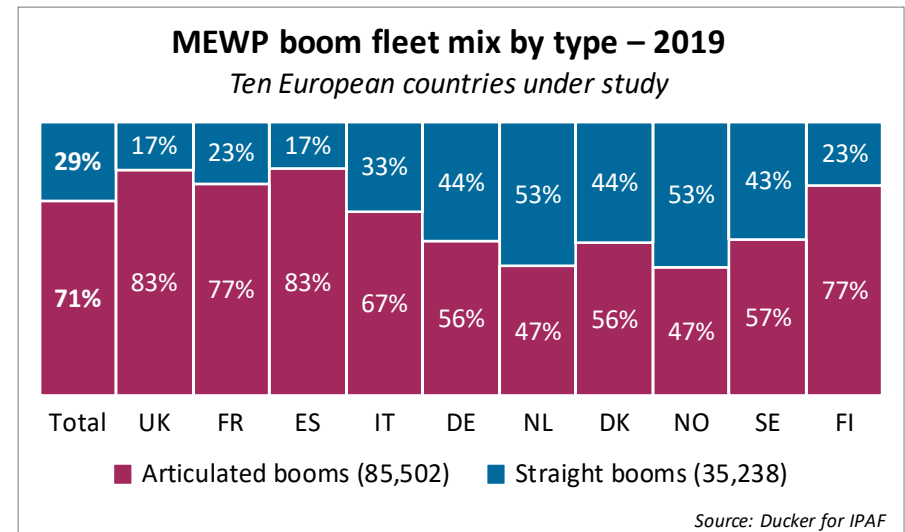
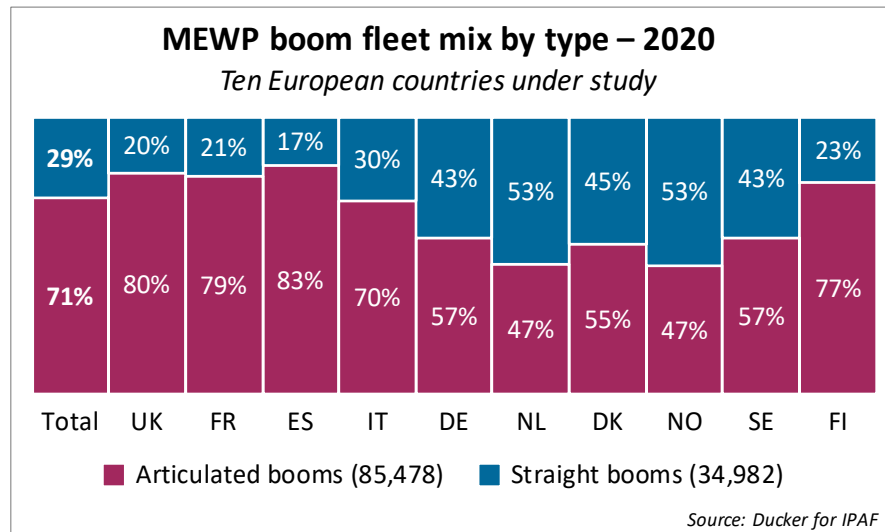
Included are powered access lifts: All booms, scissor lifts and vertical masts.
Excluded are low-level access equipment (<3m high), telescopic material handlers, forklifts, cranes and MCWPs.

+X% % unit growth, e.g. booms fleet increased by 16% from 2017 to 2018.

Market dynamics 2008-2022 – market size in units

The split between articulated and straight booms shifted slightly in favour of straight booms in 2020.

- Some rental markets, particularly in the Netherlands and Germany, tend to use straight booms heavily, but they remain popular than articulated booms in Europe overall.
- Articulated booms represent more than 75% of the boom fleet in the UK, France, Spain, and Finland.

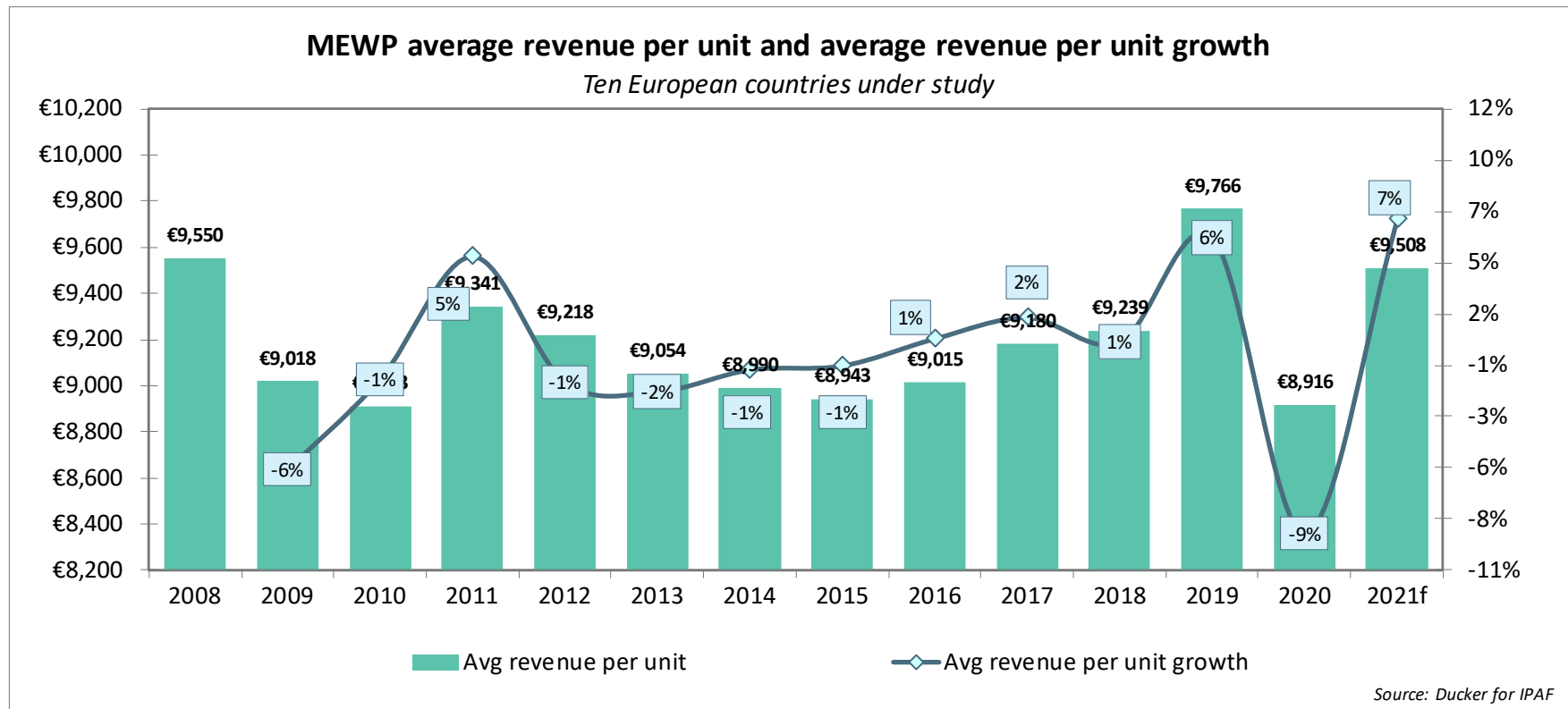


End-of-year data

Market dynamics 2008-2022 – revenue per unit

Average revenue per unit fell by 9% in 2020 for Europe as a whole, owing mainly to the significant declines in both utilisation and average rental rates during the pandemic.

- With the severe drop in utilisation rates and rental rates, as well as largely stable fleet size, average revenue per unit dropped significantly in 2020.
- In 2021, rental companies expect to see their average revenue per unit to quickly grow again to regain similar levels to those in 2019.

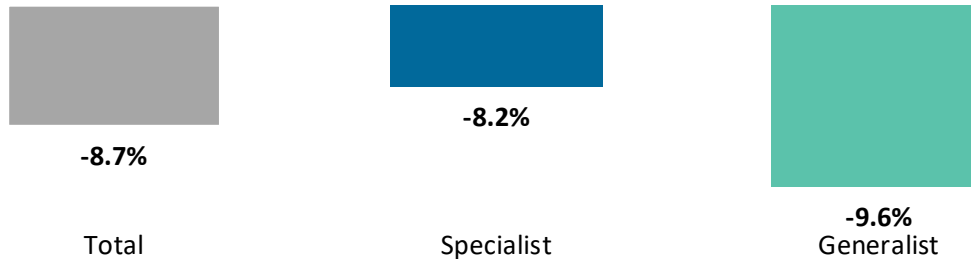


Market dynamics 2008-2022 – revenue per unit

There was a strong drop in average revenue per unit observed in all ten countries under study in 2020, owing of course to the pandemic. Generalist rental companies saw a sharper decline (9.6%) than MEWP specialists (8.2%).

MEWP average revenue per unit growth – 2020

Ten European countries under study



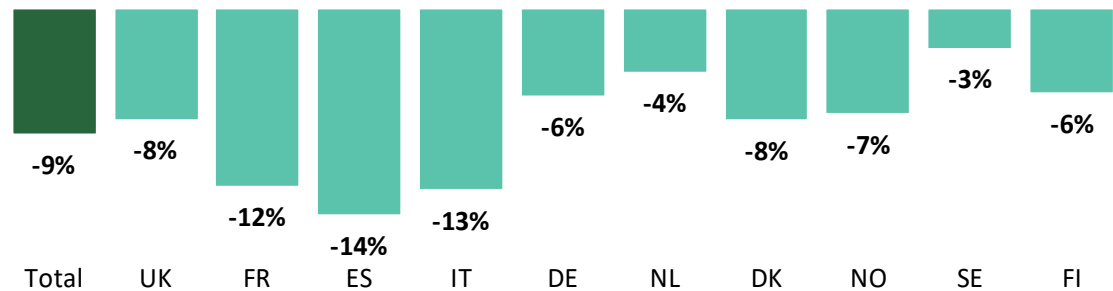
Source: Ducker for IPAF

- Average revenue per unit decreased more significantly for generalist companies than specialist companies, but both experienced a significant deterioration.

- Average revenue per unit drop differed from one country to another. Some countries such as France and Italy experienced a double-digit decrease, while some countries were less hard-hit, including the Netherlands and Sweden.

MEWP average revenue per unit growth – 2020

Ten European countries under study



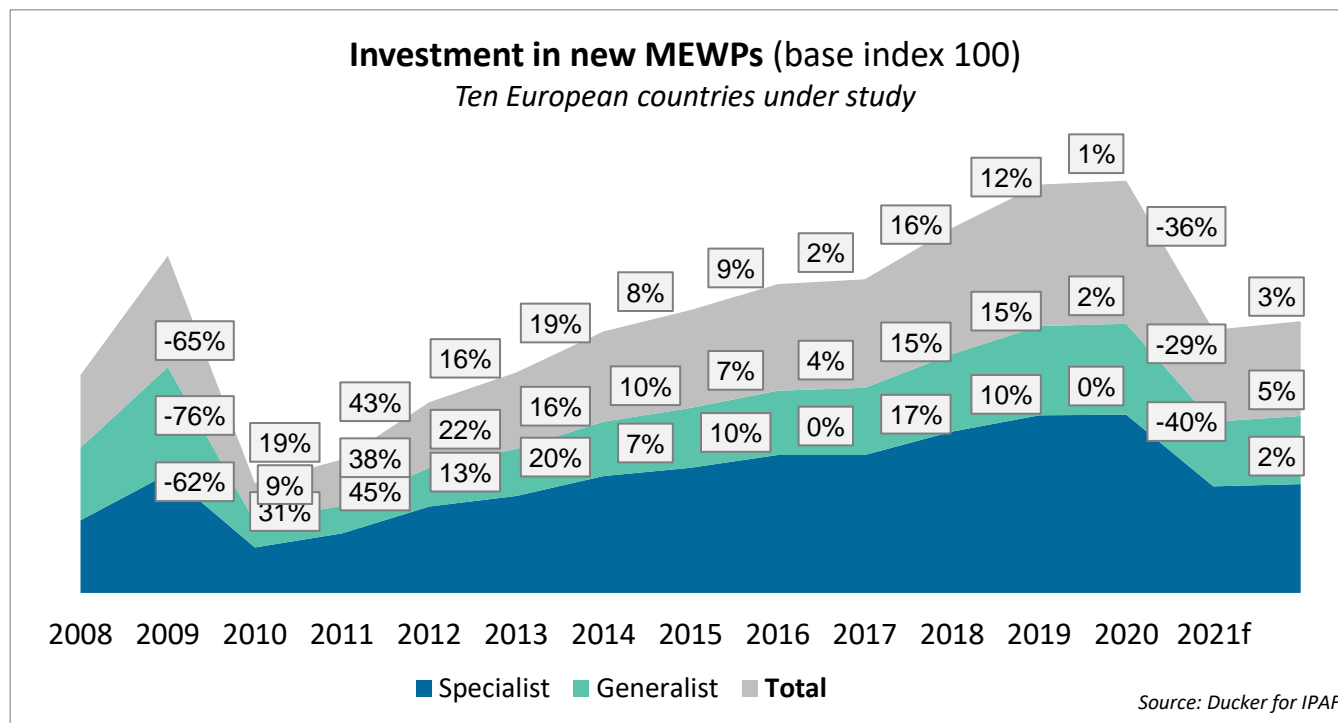
Source: Ducker for IPAF



INVESTMENT 2008-2022
IPAF Powered Access Rental Market
Report 2021 – EUROPE

As expected last year, investment in 2020 dropped significantly in all ten countries under study, though outlook for investment is much improved in 2022 and beyond, with most countries expecting a return to pre-pandemic strategies.

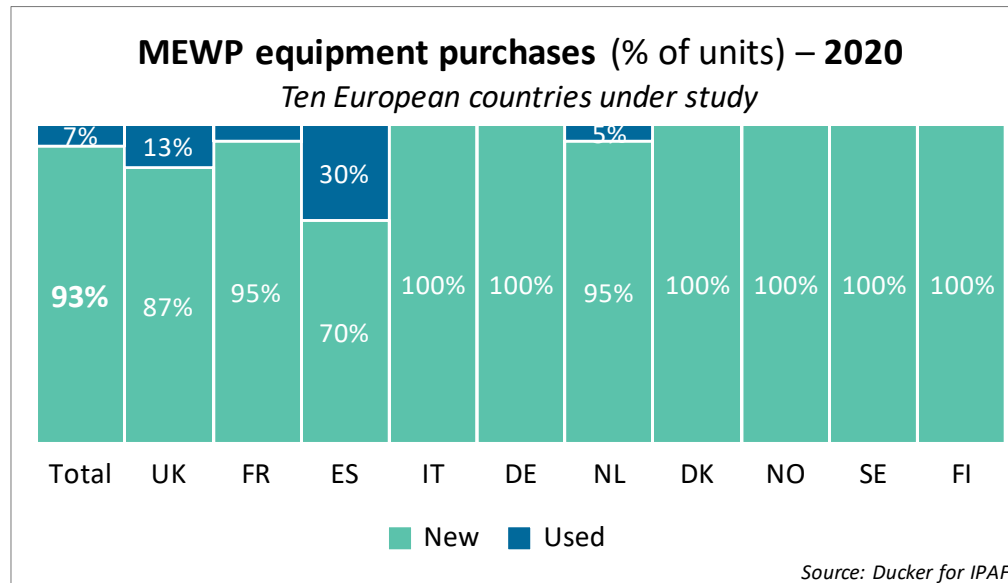
- In early 2020, rental companies in most European countries were still purchasing new machines as per their initial plans, as market outlooks were positive, and the pandemic had yet to take hold.
- However, after the beginning of the pandemic, investment was suddenly placed on hold, only maintained to ensure essential fleet renewal and, for companies in some European countries, the transition to electric-powered fleets.
- Even in 2021, rental companies remain reluctant to invest, with some uncertainty around the pandemic persisting and new issues arising from materials supply chain issues and increased OEM lead times. These should ease in 2022.



Equipment purchases

A limited number of machines were bought by MEWP rental companies in 2020, with the vast majority of purchases still being of new machines as opposed to used ones. The used market is only significant in a handful of countries.

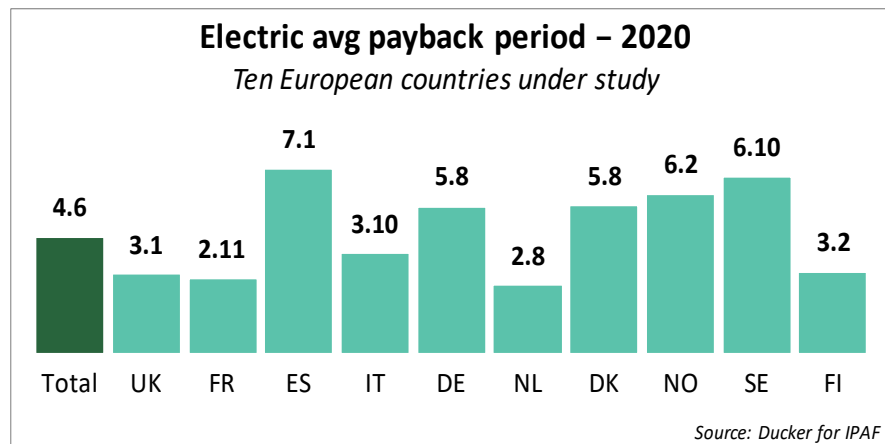
- During the pandemic, some rental companies in Spain, UK, France and Netherlands bought used machines instead of new ones, to keep costs down and also because of increasing lead times from manufacturers.



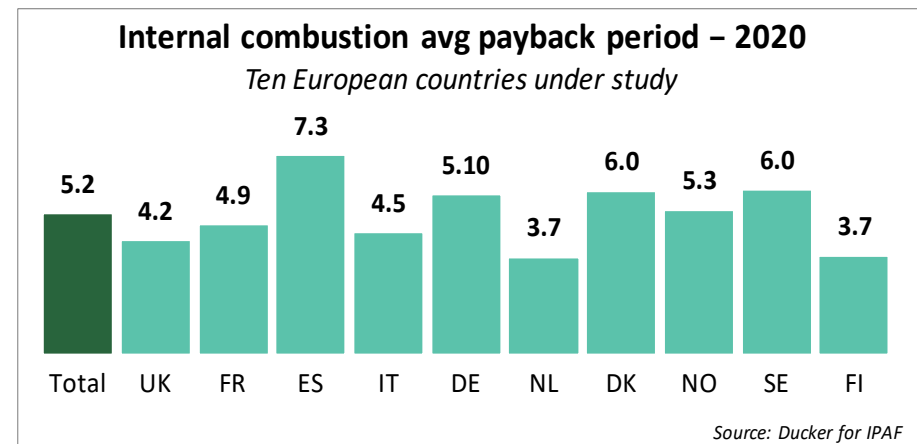
Investment – typical payback period

Typical payback period is around 4.8 years in the ten countries under study taken as a whole, with a lower ROI for all-electric equipment, owing to higher demand from customers, greater versatility, and higher rental rates.

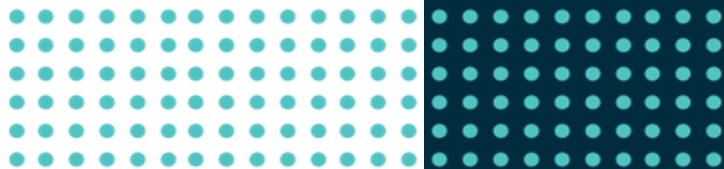
- In most countries under study, electric equipment average payback period is below internal combustion equipment, except in Sweden, Norway and Denmark, where electric machines have become the norm and dominate the market, and only the more specialist, high-reach/capability diesel powered machines are bought.



4.10 = 4 years, 2 months



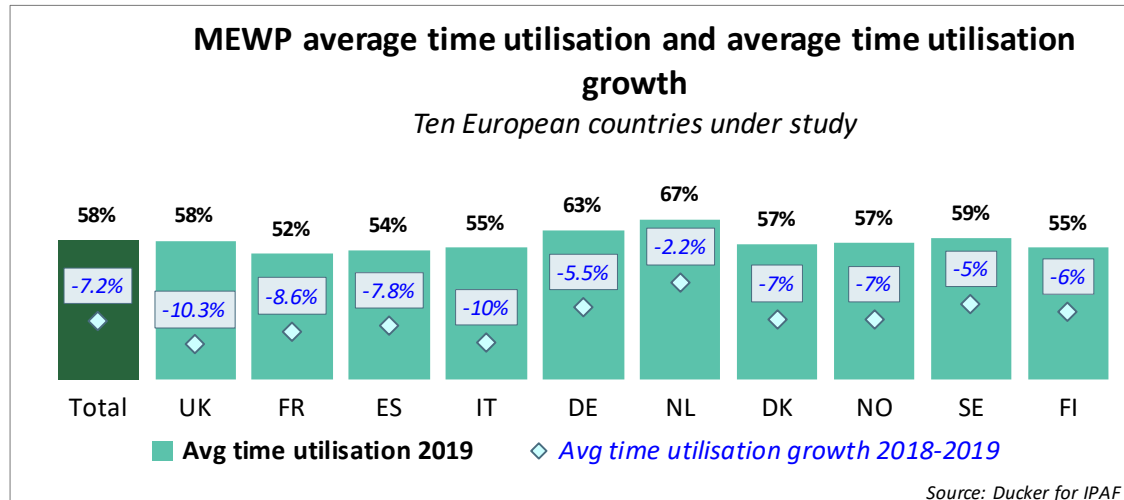
4.10 = 4 years, 2 months



OPERATIONAL ASPECTS 2008-2022
IPAF Powered Access Rental Market
Report 2021 – EUROPE

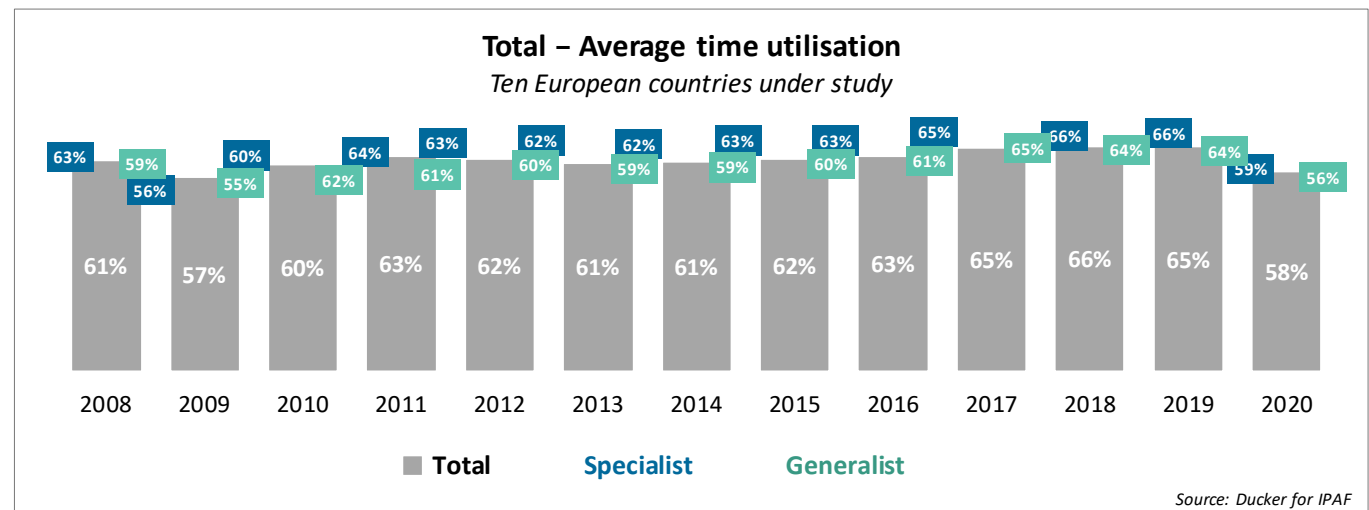
Operational aspects – time utilisation rates

The average utilisation rate in the ten countries under study dropped by 7.2% in 2020, though it began to recover at the end of 2020 and is expected to largely recover to the desired 63-68% range during 2021.



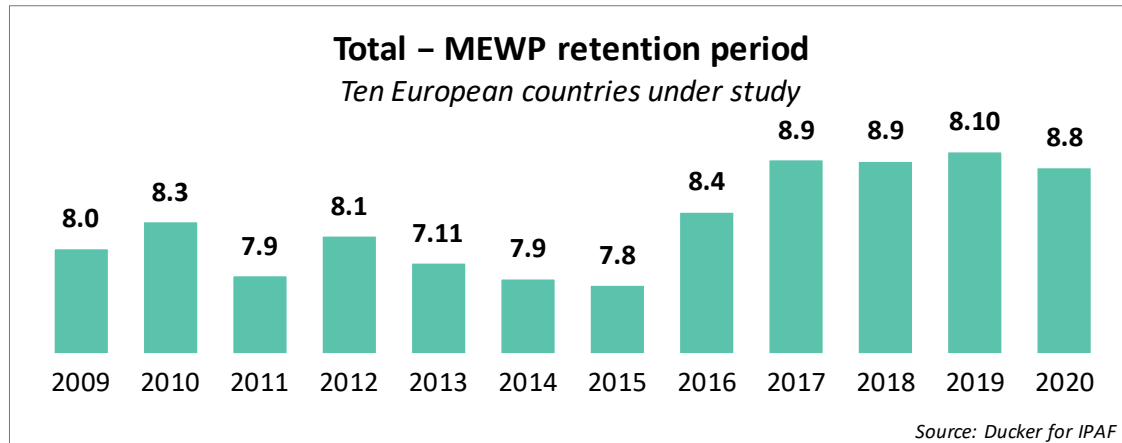
- Utilisation rate dropped in all ten European countries under study during the pandemic.
- It decreased more significantly in France, Italy and the UK, with all seeing at least an 8% decrease.
- Rental companies in the Netherlands were able to keep utilisation rates relatively stable compared to other countries.

- Utilisation rates remain higher for specialist companies than for generalists.



Operational aspects – rental rates

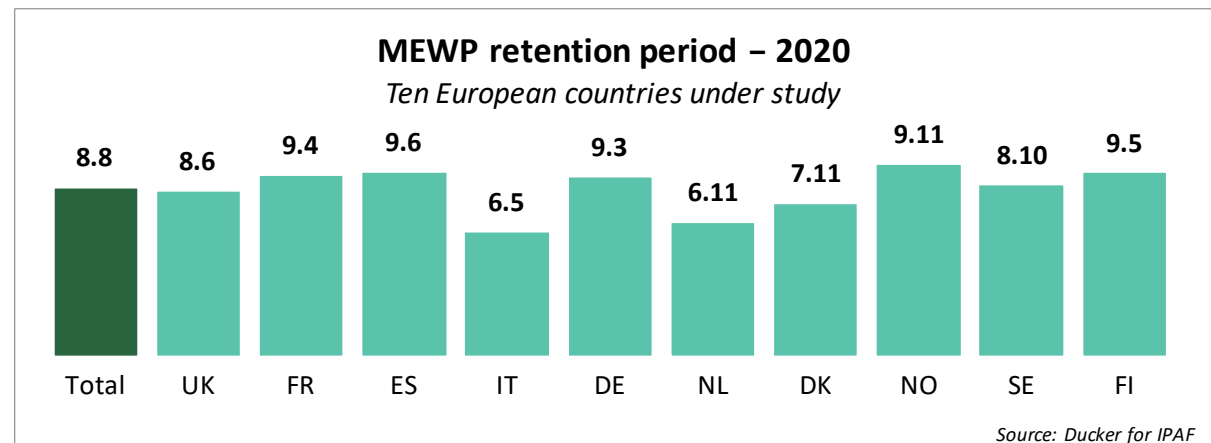
In 2020, the average retention period was slightly reduced compared to 2019, as companies sought to offload older, less versatile machines. Some countries saw an increase in used equipment sales and the value of used MEWPs rise.



8.8 = 8 years and 9 months

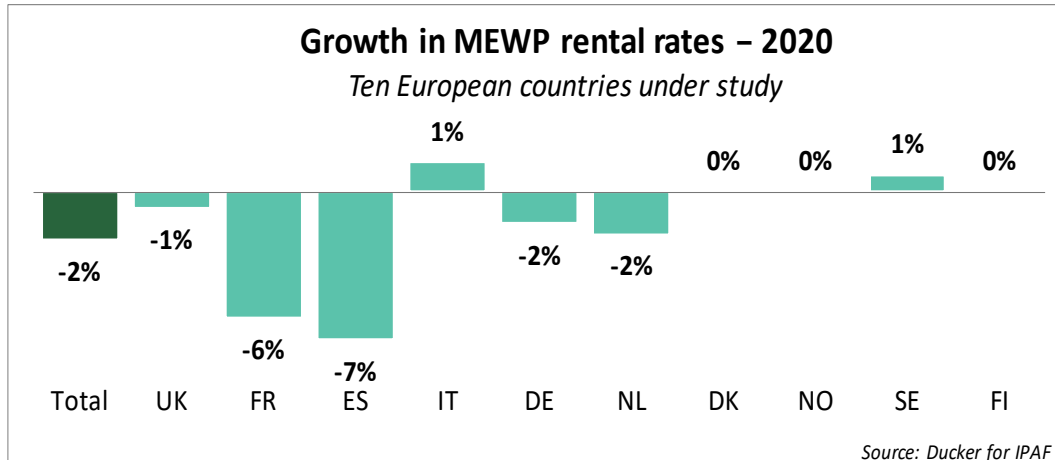
- After being fairly stable for three years, retention period dropped slightly due to the defleeting in some rental companies and an increase in the market value of used machines owing to increased prices and lead times from OEMs in late 2020, a trend that continues in 2021.

- The average retention period is longest in some of the Nordic countries (Denmark, Norway and Finland), Spain and France, where MEWPs are typically retained for over nine years.
- It is the shortest in Italy and the Netherlands, where MEWPs are retained for under seven years.

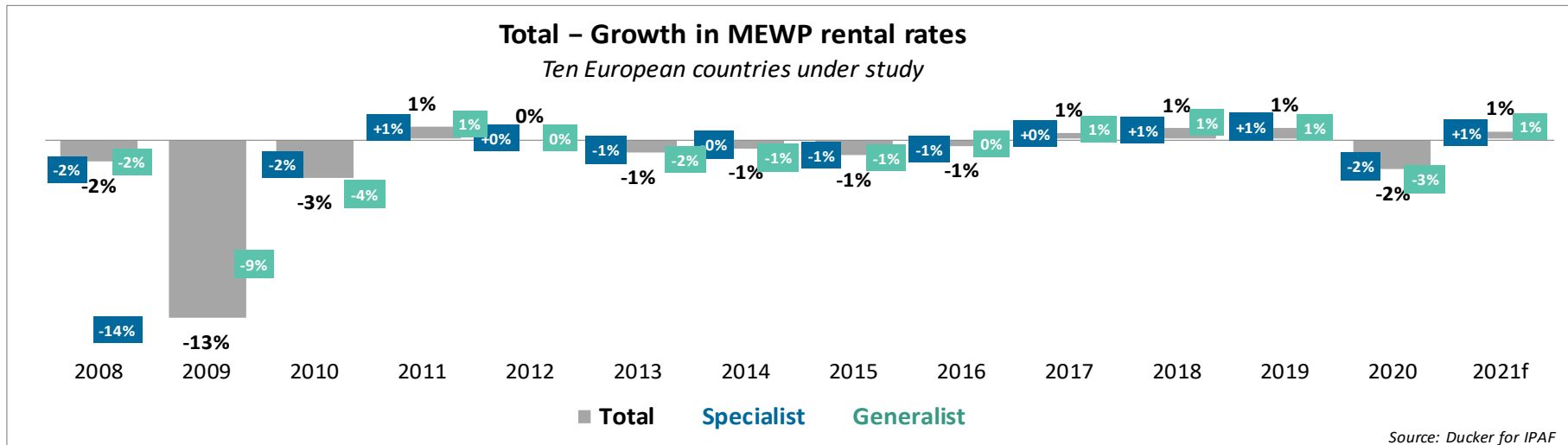


Operational aspects – rental rates

In some countries (ie France and Spain), rental companies decided to lower rental rates to boost demand during the pandemic. In other countries, maintaining rental rates at the pre-pandemic level was key to staying profitable.



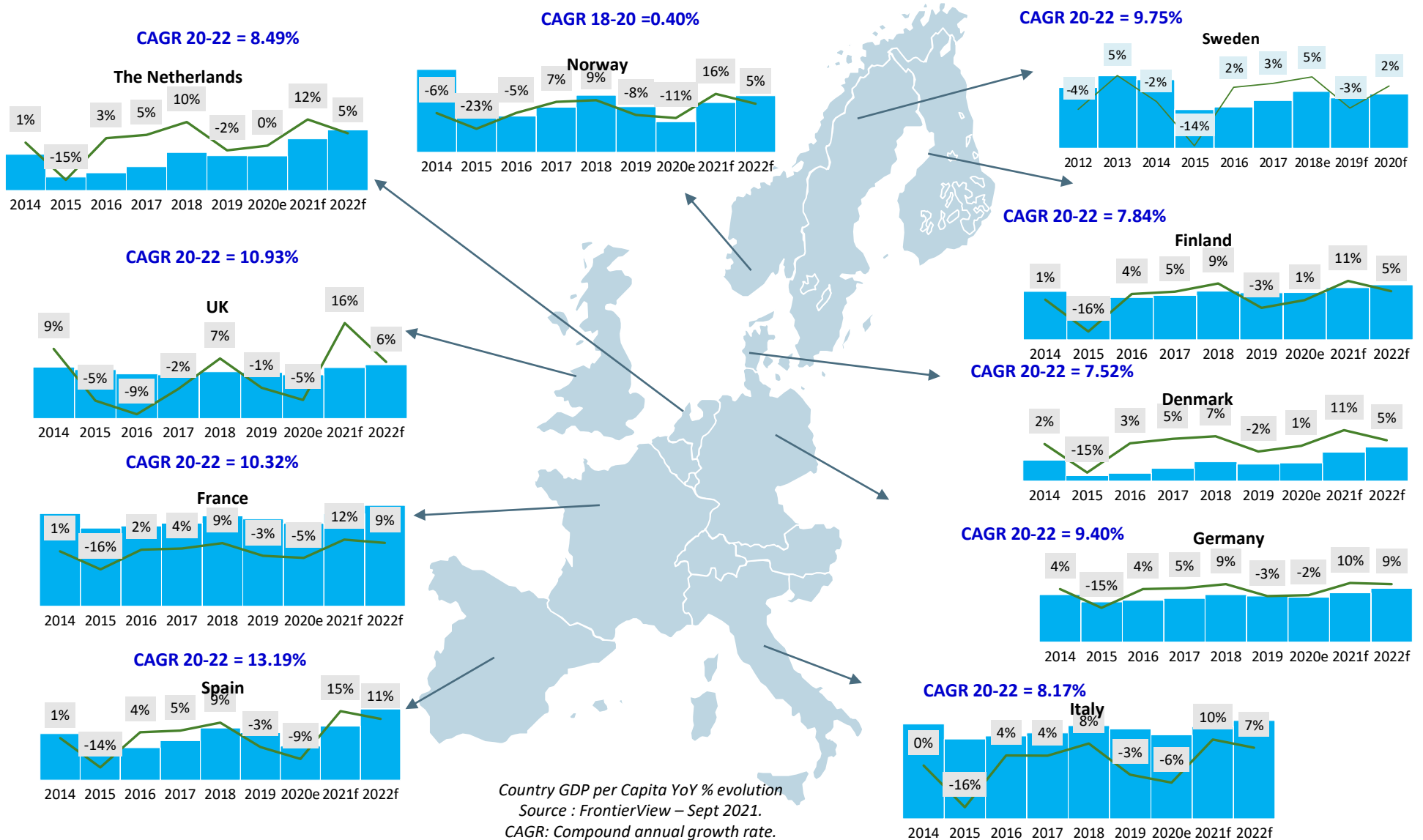
- Countries such as France, Spain, the Netherlands and Germany all saw an overall drop in rental rates of between 2% and 7%.
- Rental companies in the Nordic region and Italy also kept rental rates stable despite the pandemic.
- The average decrease for Europe as a whole was 2%. Rental rates are likely to remain unchanged in 2021.





MARKET TRENDS AND DRIVERS
IPAF Powered Access Rental Market
Report 2021 – *EUROPE*

Market trends and drivers – GDP per capita

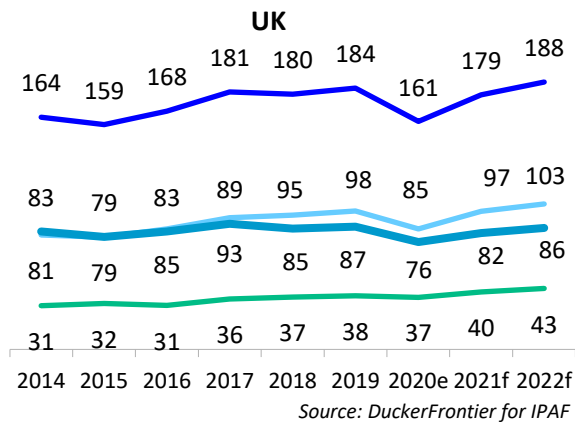


Market trends and drivers

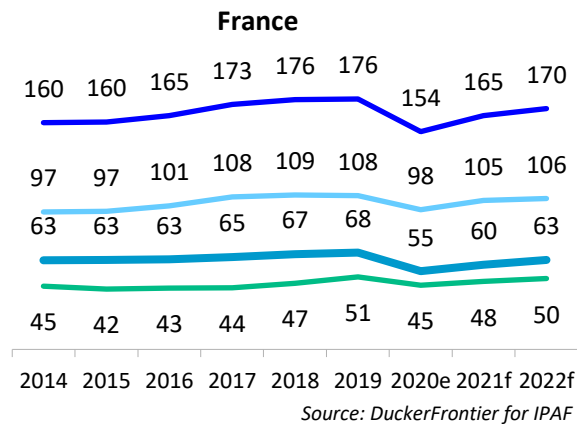
Construction output in UK, France and Germany

CAGR 20-22 = 8.28%

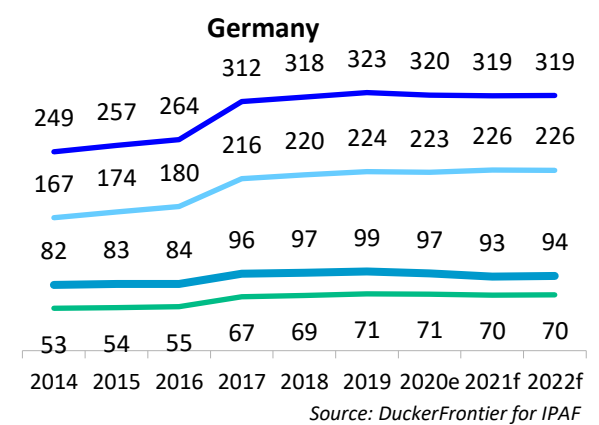
CAGR: Compound annual growth rate



CAGR 20-22 = 5.11%



CAGR 20-22 = -0.07%

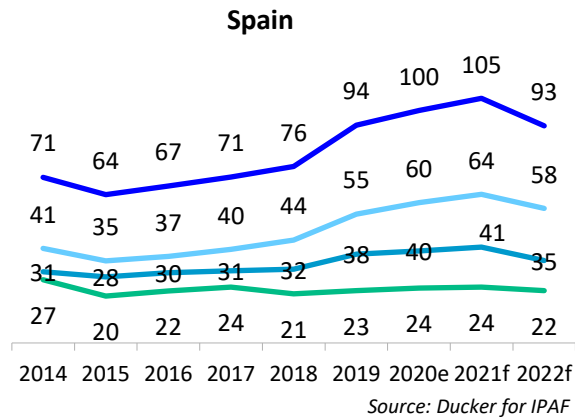


Construction pipeline (billions euros) based on Euroconstruct 2021 figures.

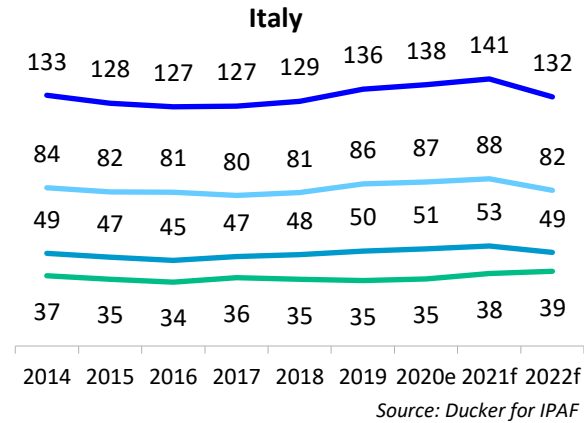
- Residential construction
- Non-residential construction
- Total construction
- Civil engineering / Major infrastructure

CAGR 20-22 = 5.58%

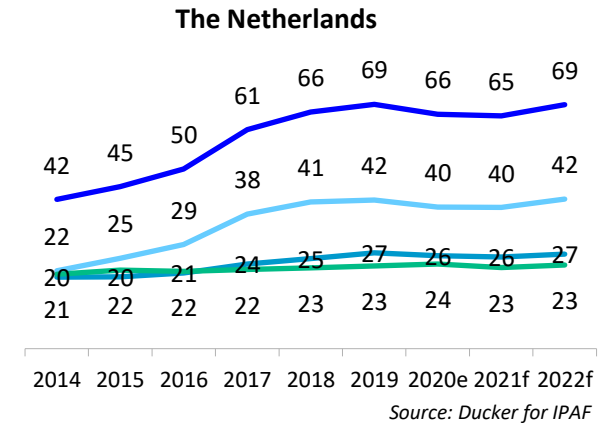
CAGR: Compound annual growth rate



CAGR 20-22 = 6.17%



CAGR 20-22 = 2.03%

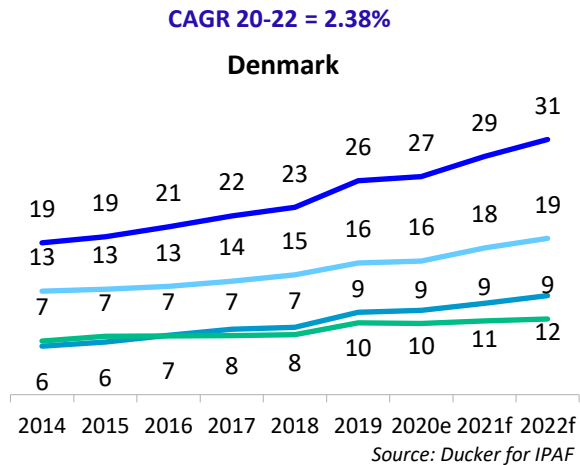


Construction pipeline (billions euros) based on Euroconstruct 2021 figures.

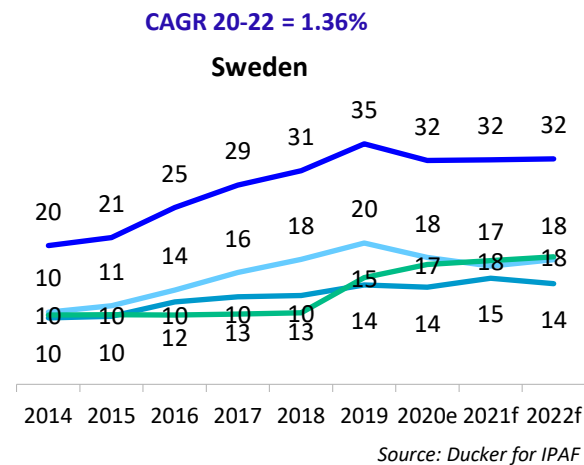
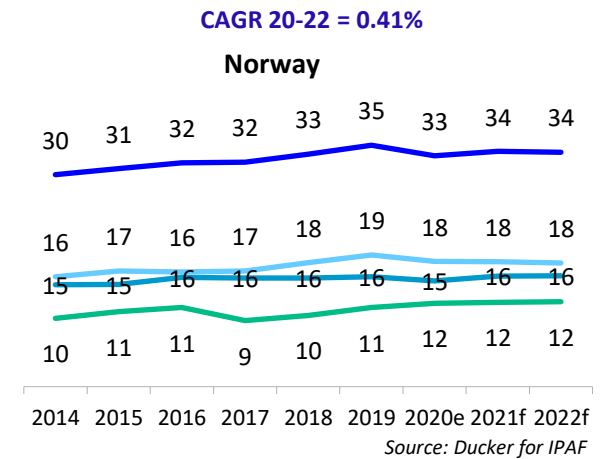
- Residential construction
- Non-residential construction
- Total construction
- Civil engineering / Major infrastructure

Market trends and drivers

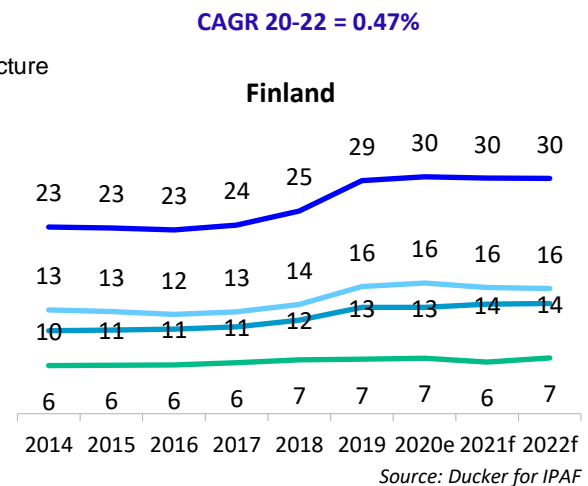
Construction output in the countries in the Nordic region



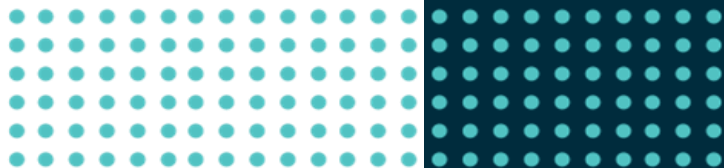
CAGR: Compound annual growth rate



- Residential construction
- Non-residential construction
- Total construction
- Civil engineering / Major infrastructure



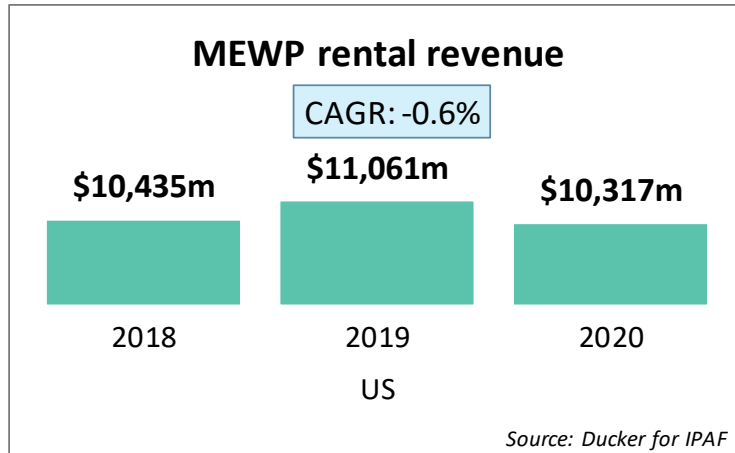
Construction pipeline (billions euros) based on Euroconstruct 2021 figures.



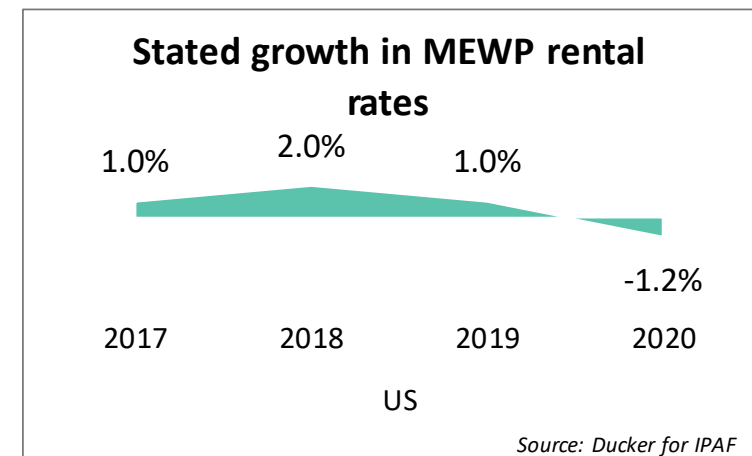
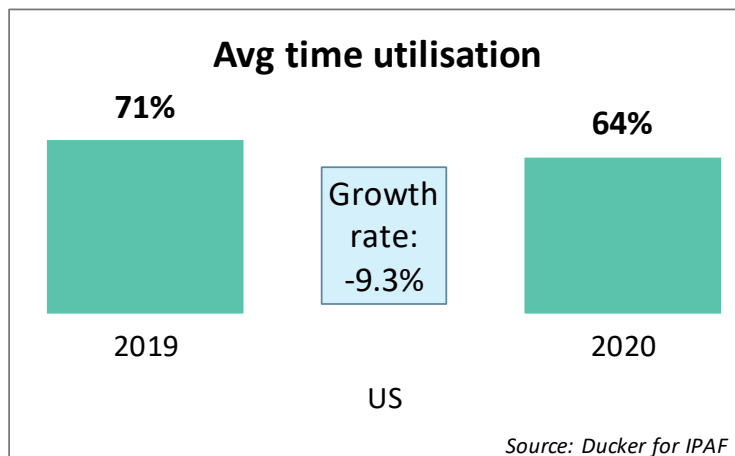
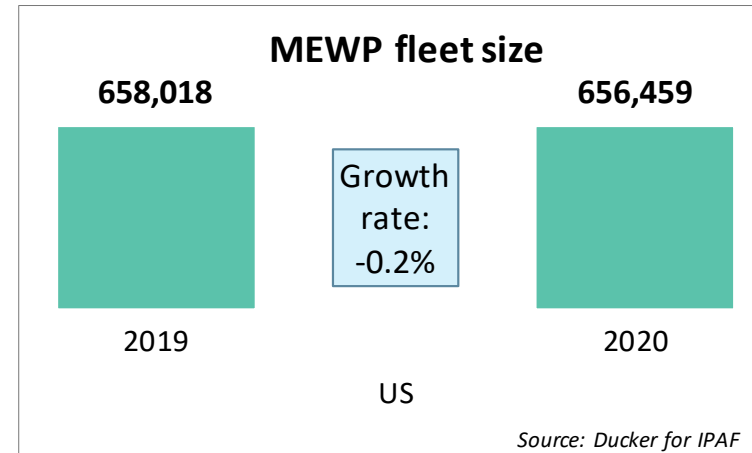
USA INFORMATION
IPAF Powered Access Rental Market
Report 2021 – *USA*

USA – Executive summary

Average MEWP rental revenue dropped between 2019 and 2020, owing mainly to the decreased utilisation rates and rental rates caused by the pandemic initially and then supply chain issues and uneven reopening afterwards.



CAGR: Compound annual growth rate

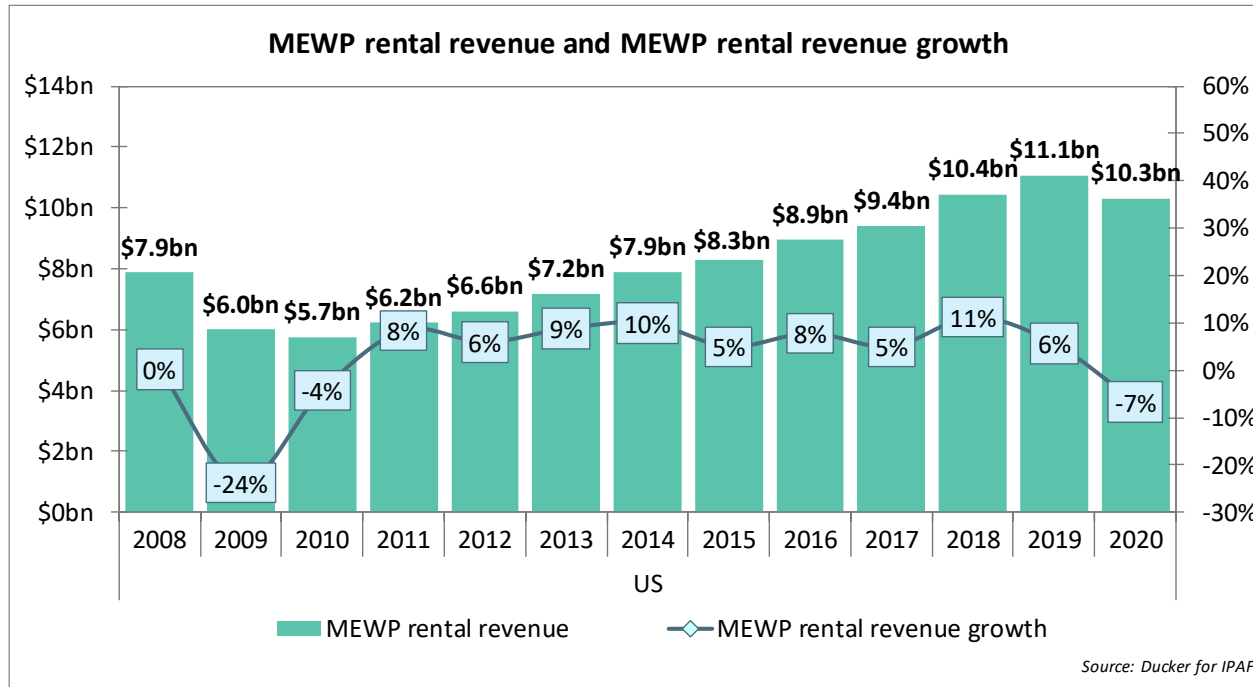




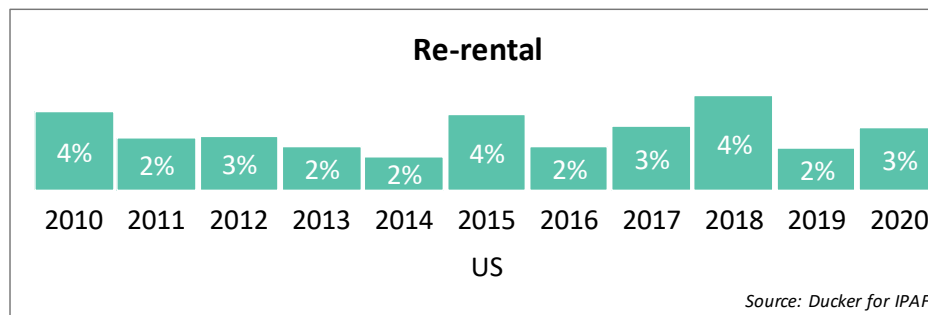
MARKET SIZE AND DYNAMICS 2008-2022
IPAF Powered Access Rental Market
Report 2021 – *USA*

USA – rental market value and growth

MEWP rental revenue decreased by 7% in 2020, being greatly impacted by the pandemic particularly during Q2 during the height of national lock downs and restrictions. Q3 and Q4 did see a fairly robust if patchy recovery.



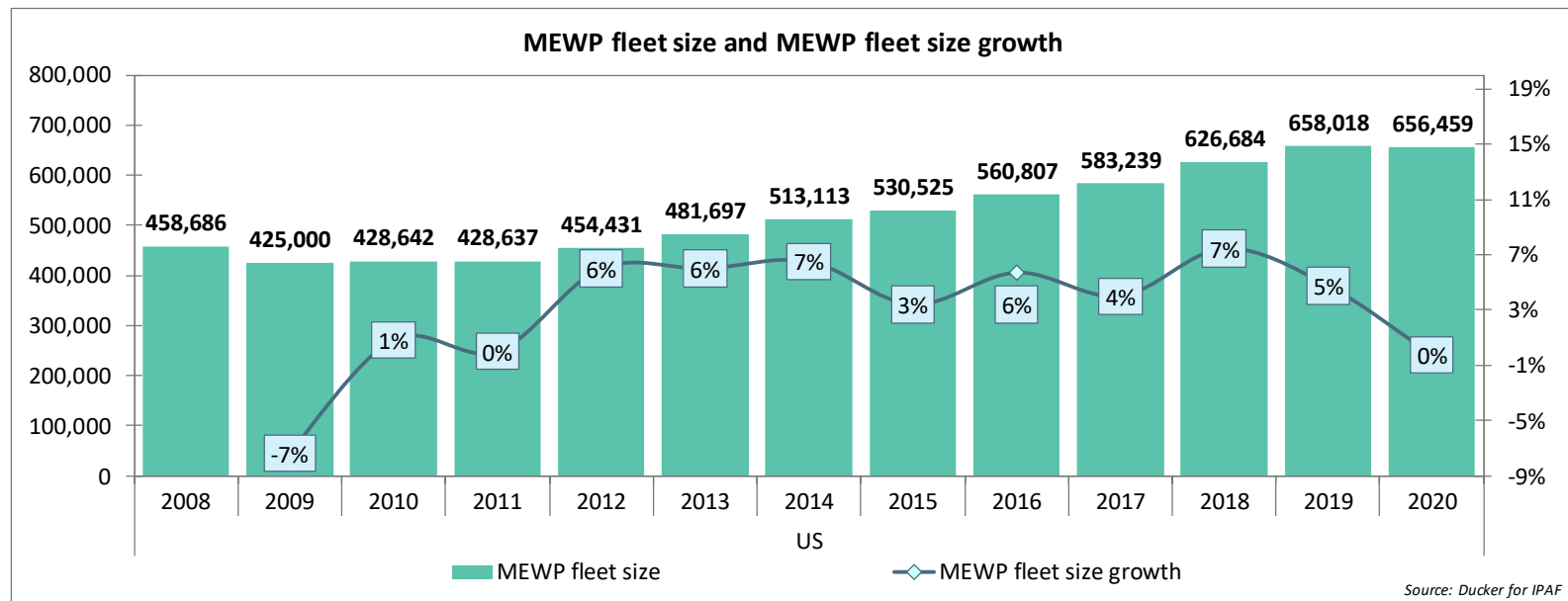
- Average revenue growth was mainly impacted in Q2 of 2020, when the pandemic had its greatest impact. In Q3 and Q4, rental companies saw activity return albeit slowly.
- After an optimistic first part of 2021, rental companies expect a return to 2019 revenue levels by 2022.
- Re-rental or cross-hire between companies slightly increased in 2020, as some companies preferred to meet customer demand by renting from other companies rather than buying new equipment.



USA – market size in units

MEWP fleet size in the US remained stable in 2020, as rental companies reduced their investment and tried to keep utilisation rates from falling too drastically. There was some investment in Q1 of 2020, offset by the rest of the year.

- Despite overall optimism at the end of 2019 and some investment in the beginning of 2020, companies considerably reduced their spending on new machines in 2020 once the pandemic took hold, leading to 0% fleet size growth.
- Some companies discarded some of their machines to maintain profitability levels, these usually being sold on to other rental companies as used equipment, and saving those companies money on buying new machines.
- In 2021, rental companies are still showing reluctance to significantly increase their fleet size, and it is expected that overall fleet size won't grow by more than 1% across the year; supply chain issues may have a bearing on this.

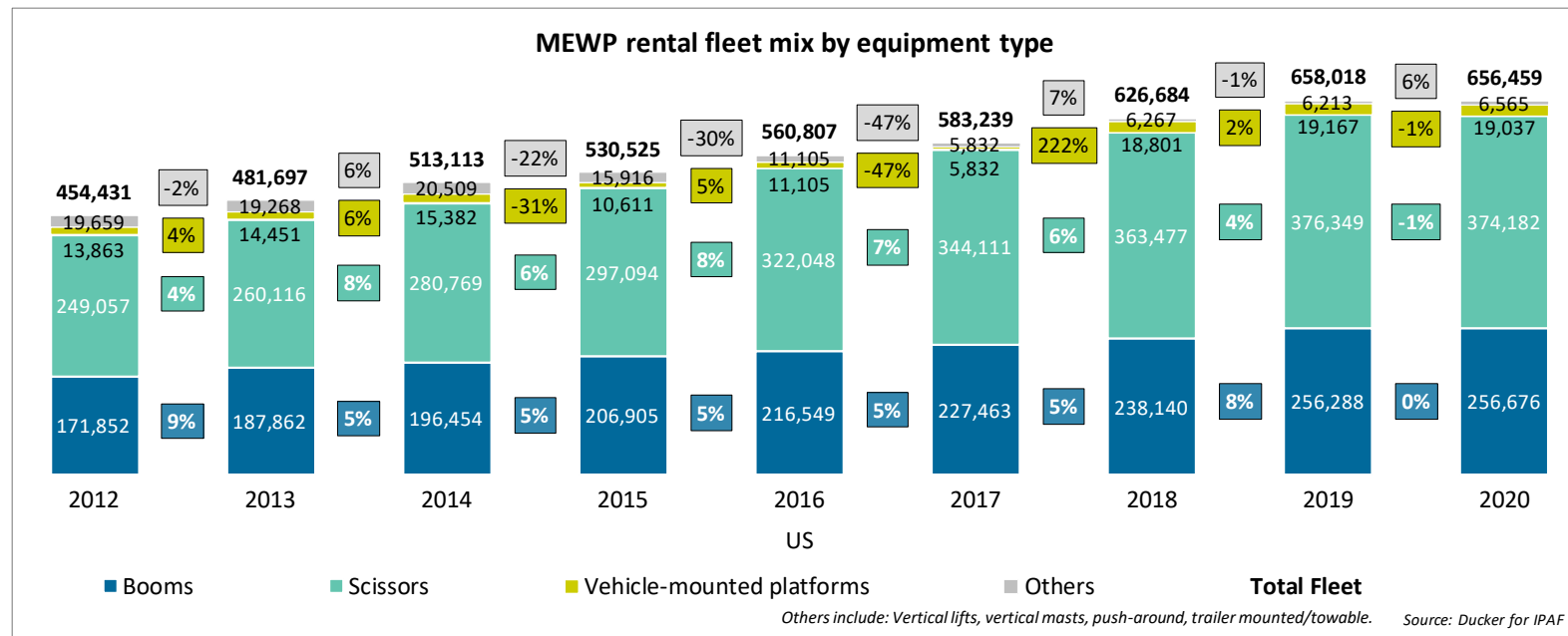


Included are powered access lifts: All booms, scissor lifts and vertical masts
Excluded: Low-level access equipment (<3m high), telescopic material handlers, forklifts, cranes, and MCWPs.

USA – market size in units

The overall fleet mix remained unchanged in 2020, barring a slight decrease of scissors during the year, mainly owing to the reduction of manufacturing activity and other impacts of the pandemic on indoor end-use activities.

- Rental companies being reluctant to increase fleet size, overall fleet mix changed little in 2020. Scissors reduced slightly in fleets due to the disproportionate effects of the pandemic on manufacturing, retail, leisure and events.
- It is likely that fleet mix will remain broadly the same in 2021, as rental companies have shown a continued reluctance to invest heavily and prefer to meet changing demand through re-rental or buying used machines.



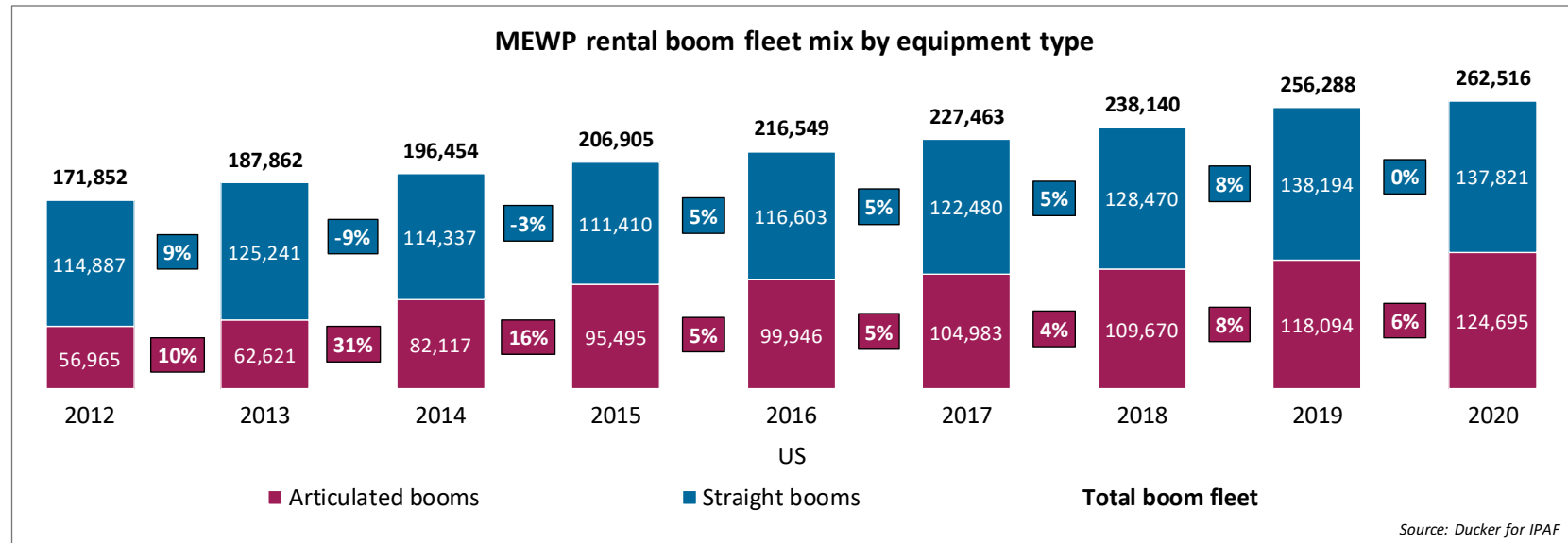
Included are powered access lifts: All booms, scissor lifts and vertical masts
Excluded: Low-level access equipment (<3m high), telescopic material handlers, forklifts, cranes, and MCWPs.

+X% % unit growth, eg both scissors and booms fleet increased by 7% from 2017 to 2018.

USA – market size in units

Articulated booms grew as a proportion of the total boom fleet by 6% in 2020 despite the pandemic, most likely owing to greater flexibility and typical uses in construction and infrastructure projects compared to straight booms.

- Articulated booms keep expanding their share of the total boom fleet, being one of the only MEWP categories to expand during 2020. This is due to the continued demand within construction and infrastructure end-use sectors across the US, which were less hard hit by shutdowns than other sectors during the pandemic.



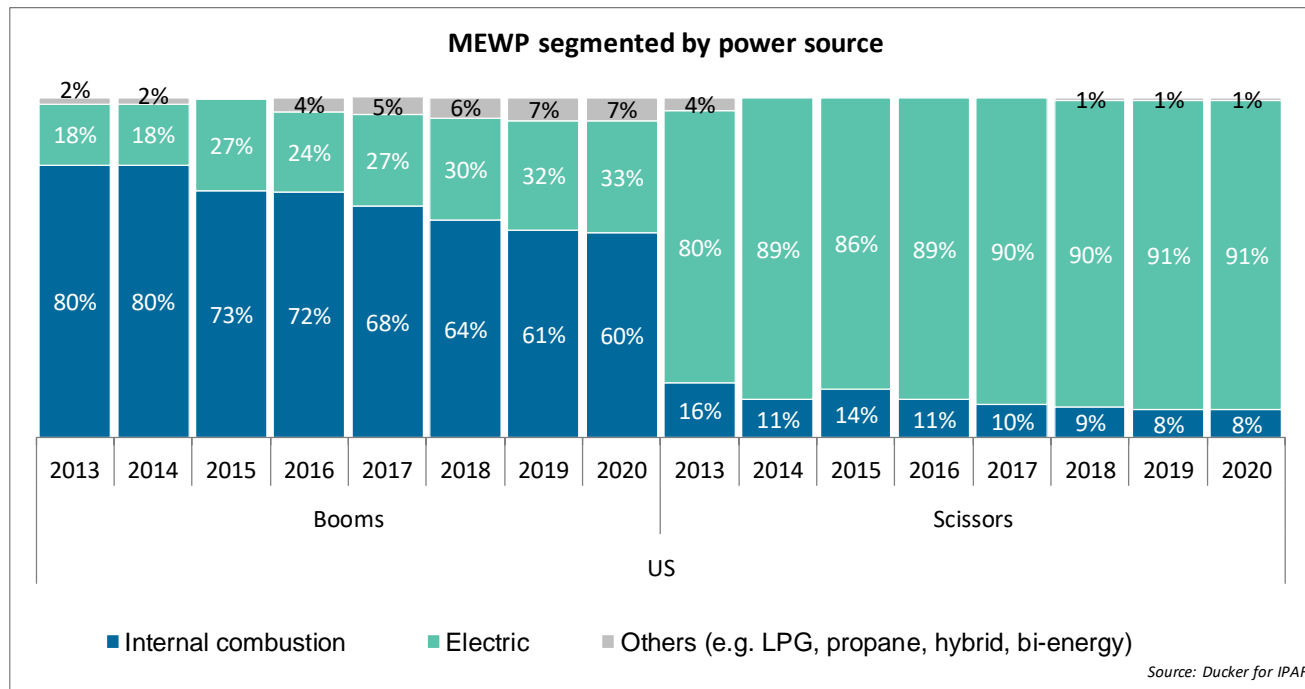
“

“The articulated 80-foot boom length is the most popular boom rental now. I have five 80-foot booms that need repair, but the rest are all out on rentals” – MEWP rental company fleet maintenance manager.

USA – power sources

As the fleet size remain largely unchanged and companies were reluctant to invest heavily, perhaps unsurprisingly power source segmentation remained broadly similar in 2020 when compared to 2019.

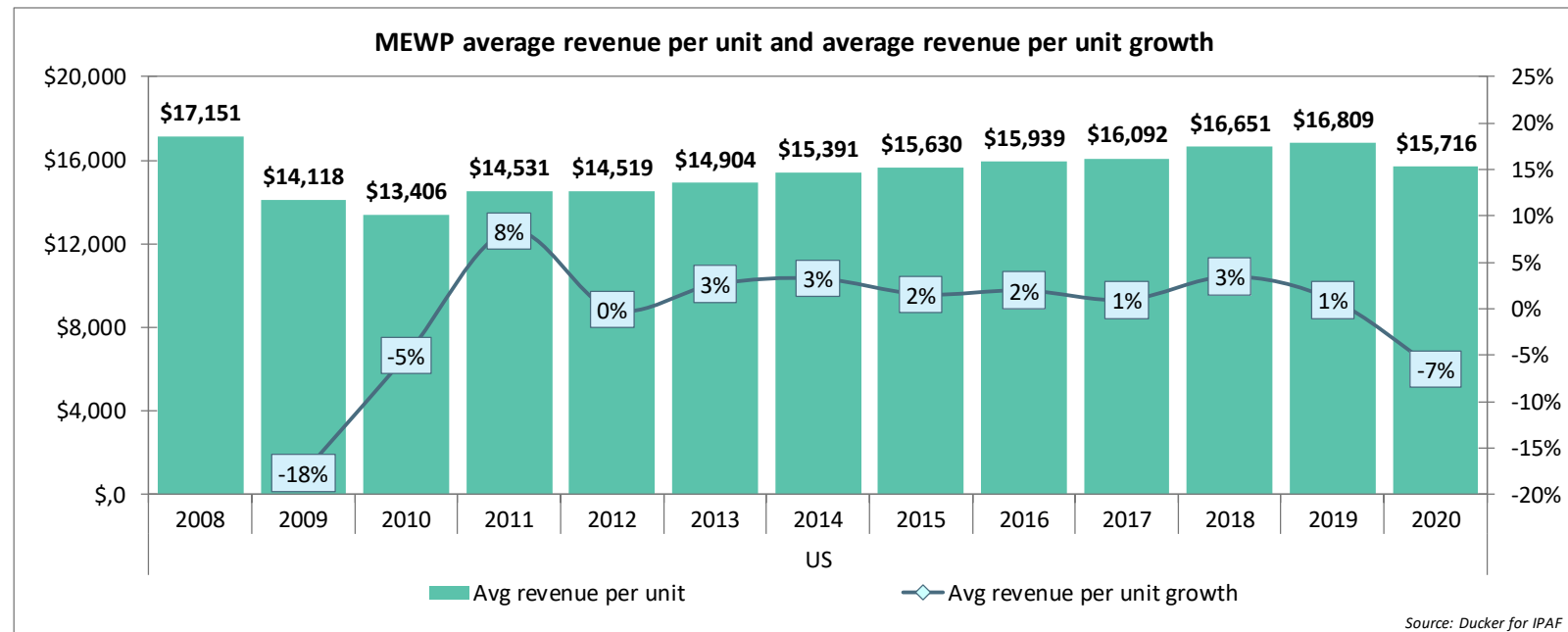
- The US booms market is still driving demanding for diesel-powered equipment. The transition to electric began a few years ago but has not taken hold as in some European countries, only gaining 1% in 2020 compared to 2019.
- The main driver of an industry wide shift to electric or hybrid machines will be the implementation of emissions regulations; some companies are anticipating they will begin replacing older booms with electric ones from 2021.
- Hybrid are likely to keep growing at a slow pace, as many rental companies prefer a direct transition to electric, especially considering the relatively high prices of hybrid machines and increased capabilities of electric ones.



USA – revenue per unit

Average revenue per MEWP unit fell 7% in 2020. There was little significant evidence of de-fleeting and most companies preferred to maintain their fleet size despite falling utilisation rates and wait for the recovery to kick in.

- With a stable fleet size and across-the-board drop in utilisation rate, average revenue per unit decreased significantly in 2020, by around \$1,000 per unit per year. Rental companies preferred to keep their fleet size and accept a reduction in revenue per unit, in anticipation of a robust return to all end-use activity in 2021.

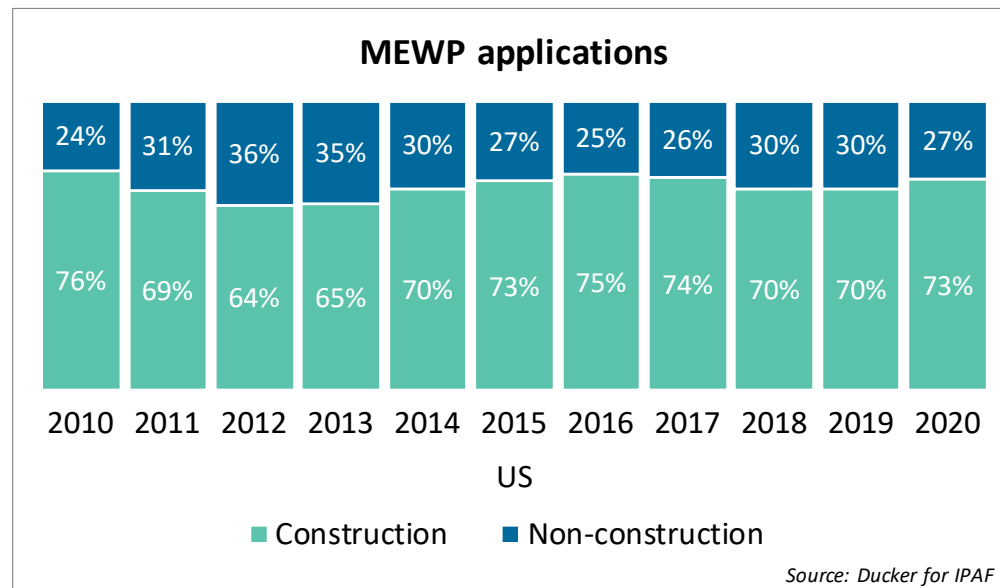


Included are powered access lifts: all booms, scissor lifts and vertical masts
Excluded: low-level access equipment (<3m high), telescopic material handlers, forklifts, cranes and MCWPs.

USA – applications

As in most countries under study the construction and major infrastructure sectors were impacted less by the pandemic than non-construction sectors, including commercial, retail, industrial (manufacturing) and events.

- During the pandemic, the construction sector was considered to have priority status and therefore was more able to maintain activity levels during lockdowns than manufacturing and other non-essential sectors.
- The main construction sub-sectors in the US are commercial and industrial building, with these sub-sectors also receiving a positive outlook for 2021 from most rental companies interviewed.



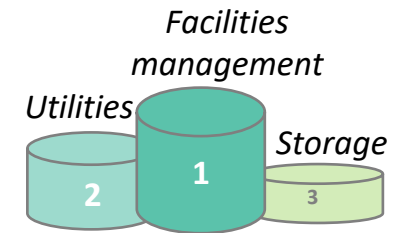
Share of rental revenue

Non-construction includes industry, maintenance, cleaning, utilities, events.

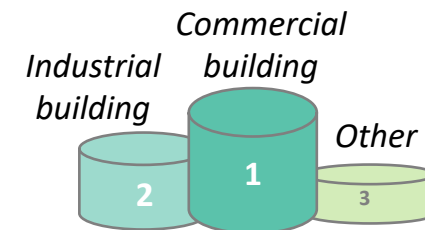
Construction includes new-build and renovation; including residential, commercial, retail and industrial.



Main non-construction sub-sectors



Main construction sub-sectors

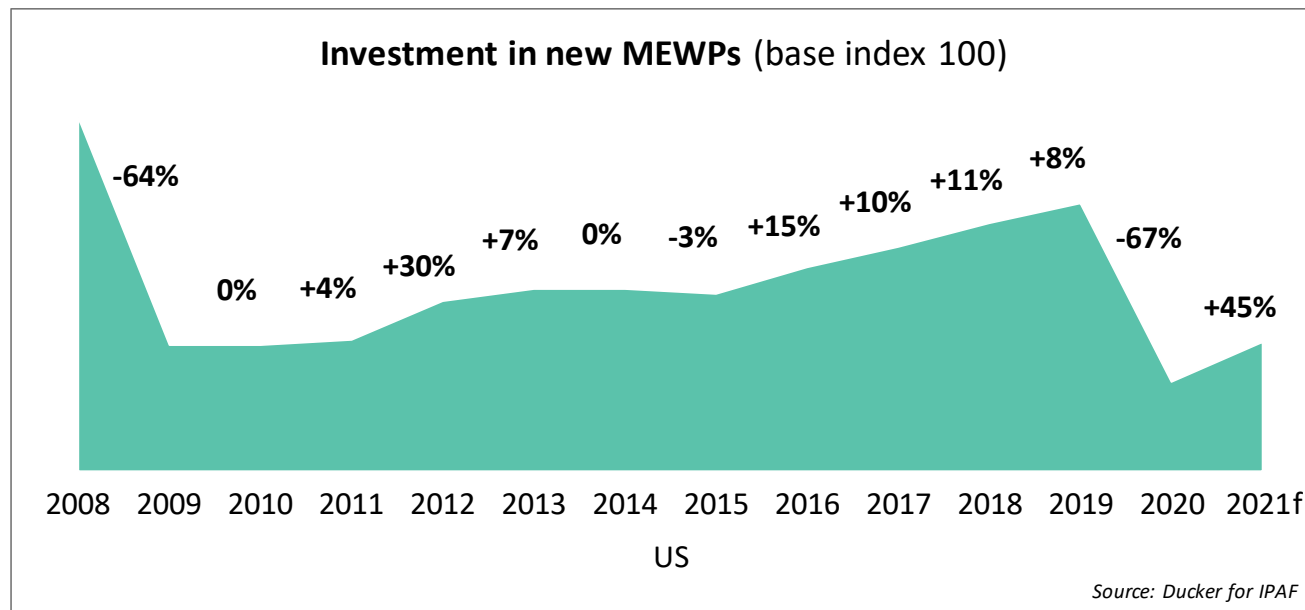




INVESTMENT 2008-2022
IPAF Powered Access Rental Market
Report 2021 – *USA*

Investment fell considerably in 2020, rental companies decreasing their strategic spending by around 67% during the year. Companies preferred to retain older machines, re-rent or buy used machines to meet specific demand.

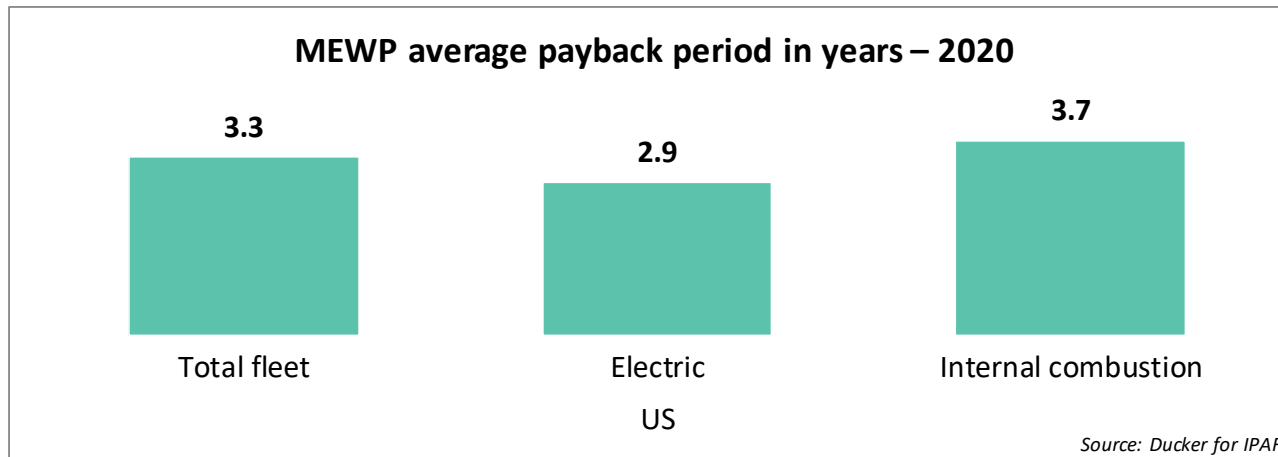
- With multiple lockdowns and the consequent reduction in activity owing to the pandemic, especially during Q2, rental companies cut investment significantly in 2020, limiting spending to the minimum, including some renewals.
- It is expected that rental companies will invest again in 2021, but still not at the level of 2019. They will mainly use investment for renewals, especially to continue the slow transition towards electric-powered rental fleets.
- A lack of availability of machines from some manufacturers, owing to key component shortages, supply chain issues and increased lead times, is proving an obstacle to rental companies that may have been planning fleet expansion.



USA – typical payback period

The average payback period of MEWPs in the US rental market across 2020 was around 3.3 years.

- The average payback period has been slightly impacted by the pandemic, from 3.2 years in 2019 to 3.3 years in 2020, as companies have been having difficulties renting their machines during the pandemic.



3.7 = 3 years and 7 months

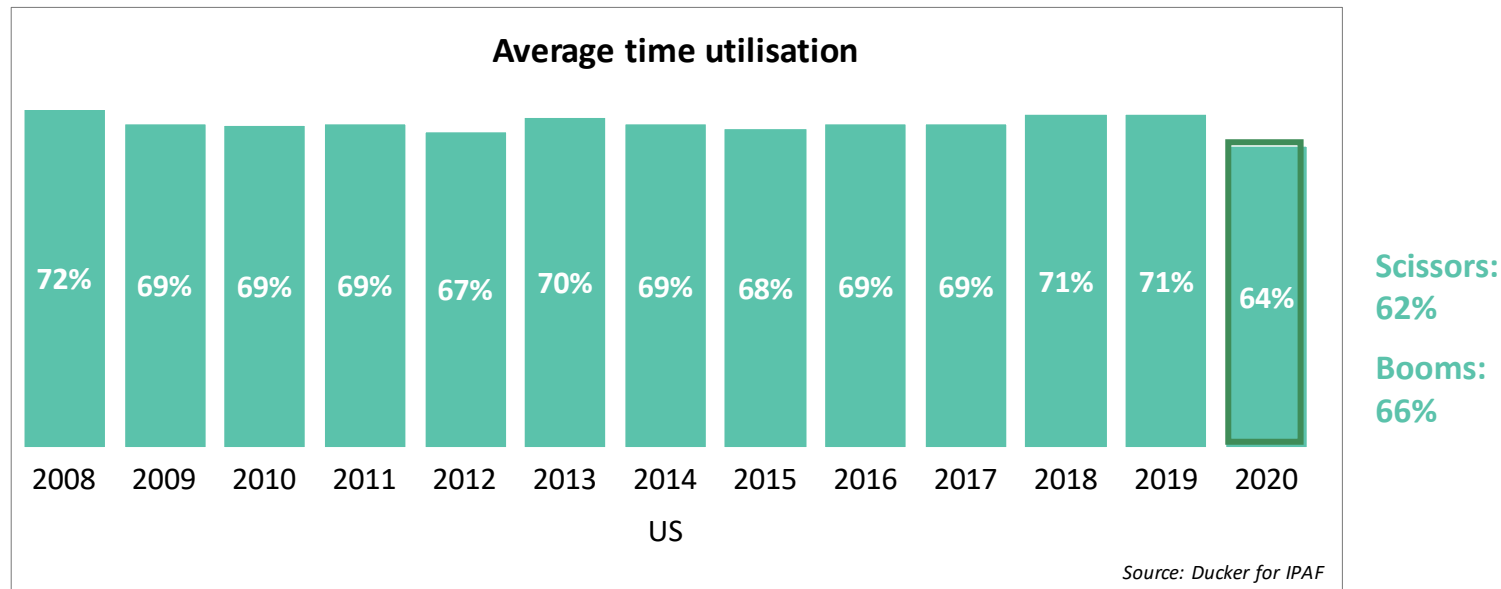


OPERATIONAL ASPECTS 2008-2022
IPAF Powered Access Rental Market
Report 2021 – *USA*

USA – utilisation rates

Average utilisation rate dropped by 7%, owing mainly to the effects of the pandemic especially during the national lockdown and consequent significant reduction in activity during Q2 of 2020.

- Utilisation rates fell by 7% across 2020 as whole, and this was driven for the most part by the considerable reduction of activity in non-construction sectors, considered as non-essential during the pandemic.
- The fall in utilisation rate varied widely depending on state, but a general decline in demand was observed all across the country.
- In 2021, utilisation rates are expected to return to at or just above 70%, slightly above typical European rates (65%).



Definition: Physical number of machines out on hire as % of total number in fleet at any given time.

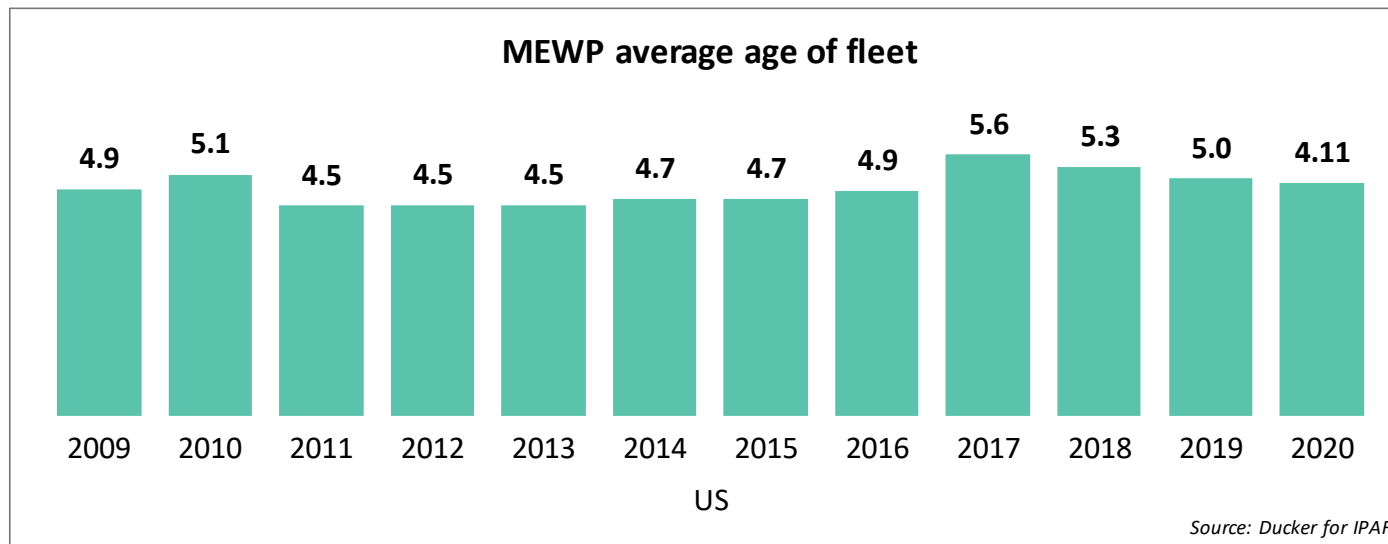


“Utilisation has been all over the place for everybody. Some states made construction essential and others did not. Construction work continued, labour wasn't always available.” – MEWP rental company manager

USA – retention period

The average retention period of machines in a typical US MEWP fleet is around four years, 11 months in 2020. This was a reduction from 5 years and above during the period 2017-2019, as companies sold off some older machines.

- The average retention period was slightly impacted by the pandemic, falling from five years in 2019 to four years and 11 months in 2020. This is likely down to the resale or used market being boosted and some rental companies deciding to discard machines earlier than planned owing to increased demand and value in the resale market during 2020 and that trend looks like continuing in 2021, as increased lead times from manufacturers persist.



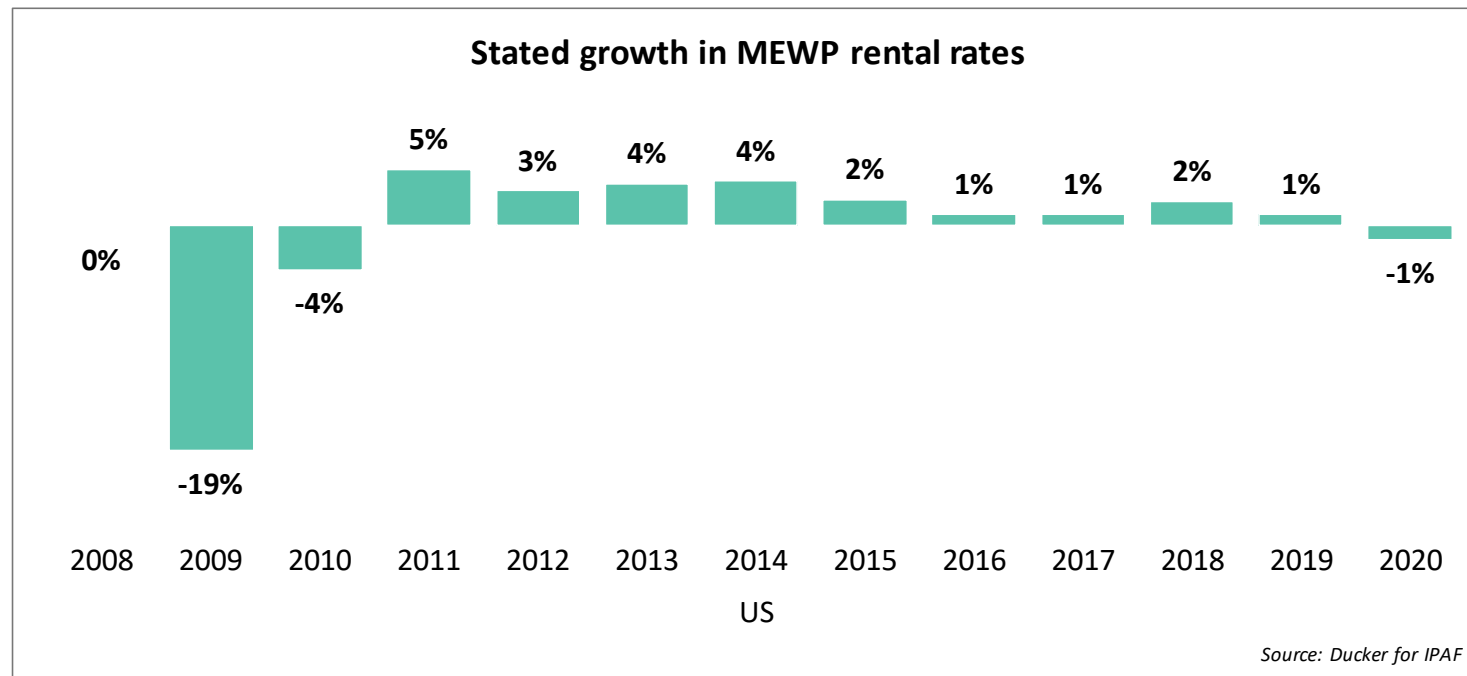
9.2 = 9 years and 2 months

Definition: Period of time that a machine is kept in fleet = selling age if acquired new

USA – rental rates

Rates reduced in 2020, as rental companies tried to recover from sharp falls in demand during Q2. Most companies maintained fleet while utilisation fell; rates were under downward pressure as demand – and competition – ramped up.

- Rental rates fell by 1% overall in 2020, after several years of continuous increase. Rental companies needed to be competitive to maintain market share and increase utilisation rate after Q2, and used rental rates as a lever.
- Prices are expected to remain stable in 2021. Companies don't want to see their ROI falling due to continued price reductions; on the other hand, the majority remain cautious in their outlook and overall strategy.



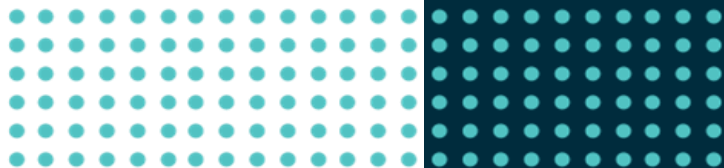
“Rental rates have remained the same for the past few years, except in 2020 when they fell slightly. We have no plans to increase our rental rates in 2021.” – MEWP rental company strategy planner.



A PERSPECTIVE FROM THE EDITOR OF
ACCESS INTERNATIONAL MAGAZINE
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Report 2021 – *USA*

- The US market has rebounded quickly from the worst effects of the pandemic in 2020 and is now seeing growth that equals or even surpasses that of 2019. It is worth remembering that the access and rental markets, both in North America and Europe, were beginning to slow in the second half of 2019, following a strong market in the first half of the year.
- In the US in particular, political uncertainty surrounding the 2019 Presidential Elections and difficult transition period led to wider economic volatility, and by the beginning of 2020, before the Covid-19 pandemic struck, access rental and manufacturing companies were already forecasting a dip in business activity and revenue – a situation that was not previously anticipated.
- While the upheavals of the pandemic were obviously even less expected, the US is therefore now experiencing a revival after a period of negative growth that would have happened anyway, and looking at the most recent results of the major manufacturers, rental companies and industry associations in the country, the effects of the economic downturn and the pandemic do seem to have been largely overcome.
- Strong demand in the US for construction and industrial services, paired with the likely passage of the Infrastructure Investment and Jobs Act of 2021 (IIJA) by US Congress are laying a strong foundation for significant growth in the rental sector. The IIJA could increase rental revenues by about \$8 billion over the eight-year spending program the IIJA authorises.
- And, according to research company GlobalData, the US construction industry is predicted to grow by an average of 3.3% a year between 2021 and 2025, following the US Senate's passing of the new \$550 billion infrastructure bill announced by President Joe Biden.
- United Rentals is nearly back to pre-pandemic activity and demand. The world's largest rental company's 2021 second quarter revenues were \$2.287 billion for the three months leading to 30 June. Looking back at 2019, United's second quarter revenues were \$2.29 billion. The American Rental Association's (ARA) updated outlook, published in August, now forecasts equipment rental revenue to exceed \$47.8 billion in 2021, nearly a 3.5% increase over 2020.

- Sunbelt, the US's second largest MEWP and generalist rental company, saw its revenue rise by 16% in the three months to 31 June – the first quarter of its financial year. And revenues were up 7% on the same period in 2019.
- The American Rental Association (ARA) confirms the uptick and forecasts that construction and industrial segment revenues are expected to dramatically increase by 11.9% to \$38.9 billion in 2022, surpassing the record \$37.7 billion in revenue set in 2019. Overall, the ARA forecast growth across all equipment rental sectors to be 3.9% in 2023, 2.4% in 2024 and 3.5% in 2025.
- JLG echoes this trend in its most recent financial statement by forecasting “multi-year” growth for the access industry for the foreseeable future. Tim Morris, JLG's Senior Vice President of Sales, Market Development, Marketing and Customer Support, Americas, says: “While we did anticipate a gradual growth in aerial equipment sales as job sites began to reopen and demand for equipment increased, the volume came both earlier and faster than expected across all our product lines including boom and scissor lifts, telescopic handlers and low-level access equipment.”
- Of concern are ongoing supply chain constraints, which continue to be a challenge, and materials costs continue to climb. As Morris points out, with the US inflation rate hitting a 13-year high in August-September, manufacturers and all those who are part of the rental industry ecosystem are experiencing unprecedented pricing pressures.
- The September Market Trends Report from auctioneer Ritchie Bros raises another factor. OEM production delays contributed to the sharp decline in the total number of new boom and scissor lifts sold, therefore this “unprecedented demand” from the market has led to used aerial equipment prices rising by 29%.
- On increased investment in low or zero-emission equipment, Ashtead, owner of Sunbelt Rentals, has outlined its strategic Sunbelt 3.0 plan, under which it is committed to decreasing carbon intensity by 35% by 2030, with a shorter-term goal to reduce it by 15% by 2024. These objectives from rental companies will drive investment in all-electric machines across the board, and in particular rough terrain MEWPs.



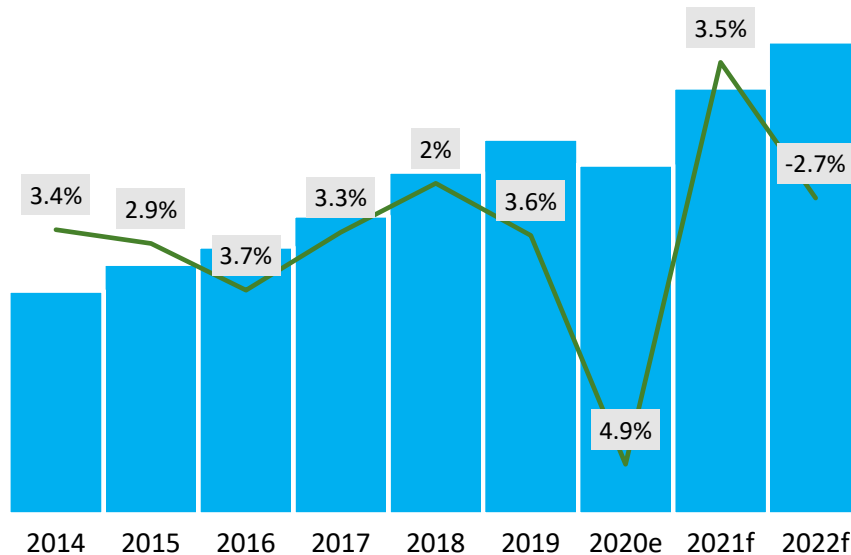
MARKET TRENDS AND DRIVERS
IPAF Powered Access Rental Market
Report 2021 – *USA*

USA – Market trends and drivers

GDP dropped by 3.2% as a whole during 2020, mainly owing to the ongoing effects of the pandemic; overall unemployment rate grew, to stand at 4.3% at year-end 2020, compared with 3.9% at the end of 2019.

Compound Annual Growth Rate CAGR (2017-2019): 3.46 %

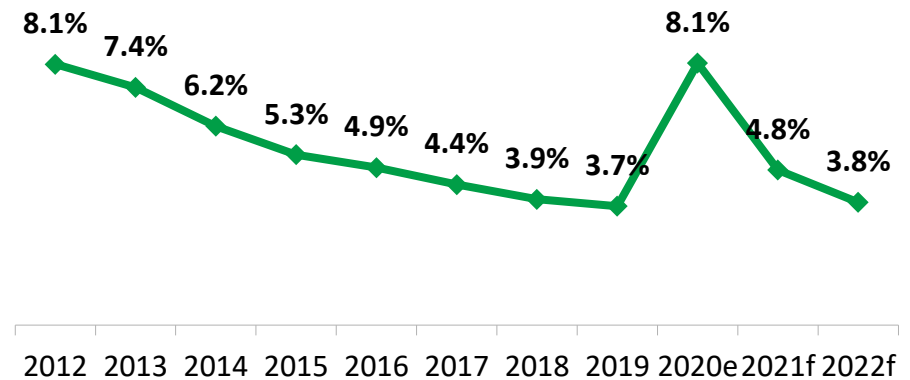
US – GDP per capita YoY% growth



US GDP per Capita YoY % evolution

Source: FrontierView – Sept 2021

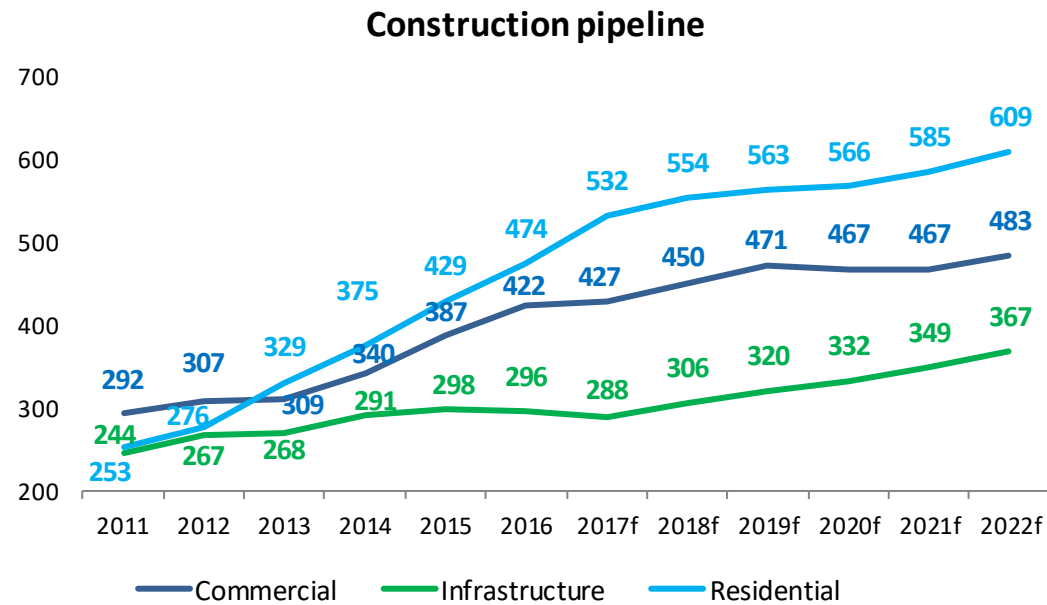
US – Unemployment rate



Source: FrontierView, Sept 2021

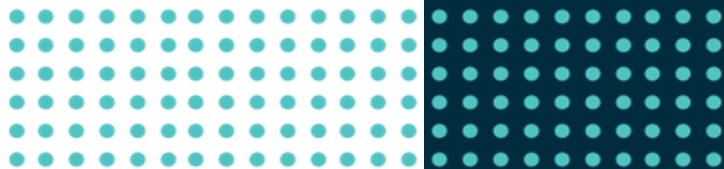
USA – Market trends and drivers

Despite a significant shrinking in overall GDP during 2020, construction output remained stable in 2020, sustain activity in core parts of the US equipment rental industry. It is expected to keep increasing throughout 2021.



Source: DuckerFrontier for IPAF

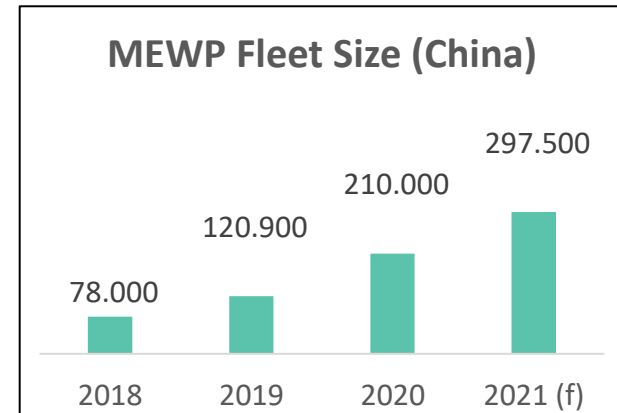
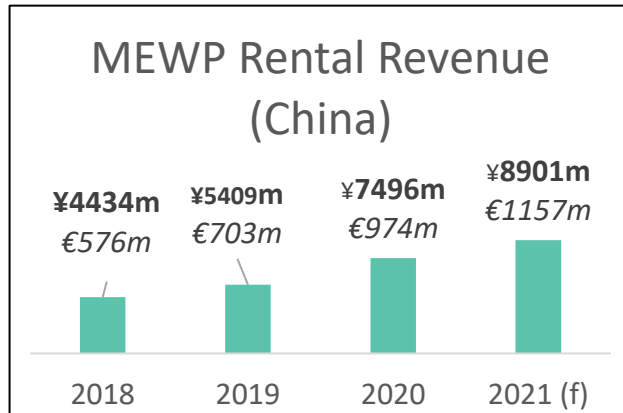
Source: FMI Construction Outlook.
Millions of current dollars.
Fourth quarter 2021 forecasts.



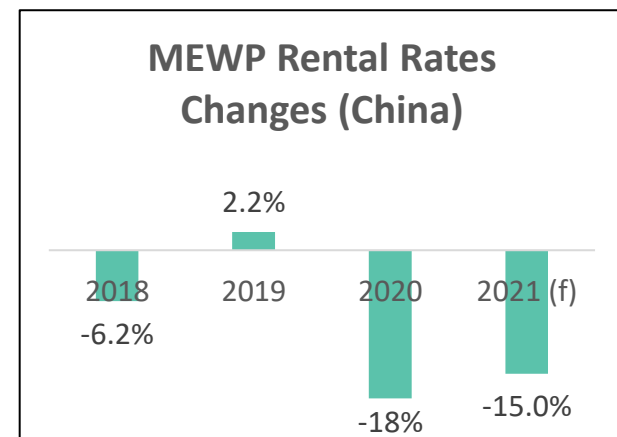
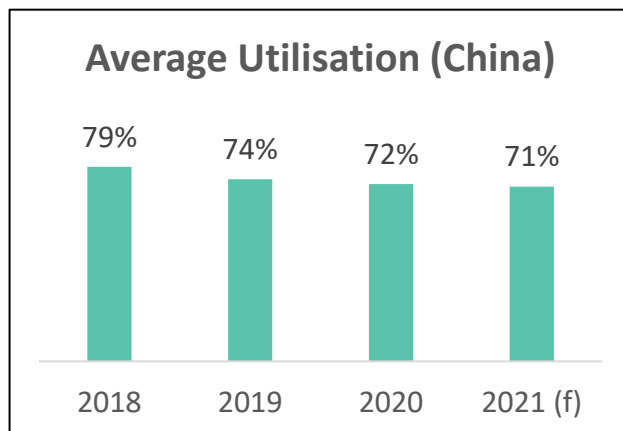
CHINA FOCUS
IPAF Powered Access Rental Market
Report 2021 – *CHINA*

China – key findings

China's MEWP rental market is in a rapid development phase with increasing total rental units and rising revenue. Overall utilisation rate decreased slightly, while rental rates dropped significantly in 2020, but total fleet size rose.



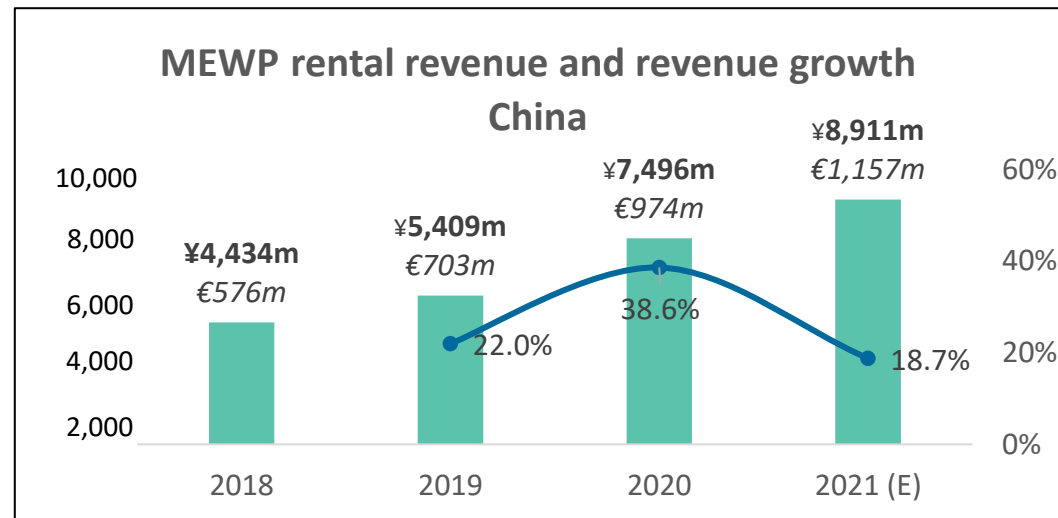
- Major rental companies invested heavily in new MEWPs in 2020. To seize more market share, rental companies competed fiercely on price, which led to a significant decrease in average rental rates.
- The outbreak of the pandemic in the first half of 2020 led to stoppages of many major construction projects. Therefore, the utilisation rate of MEWPs over the whole of 2020 decreased to 71-72%.



China – rental market value and growth

Thanks to strict and rapid lockdowns in the early days of the pandemic, followed by sustained demand from all major end-use sectors, Chinese MEWP rental value achieved significant growth throughout 2020 as a whole.

- China's MEWP rental market revenue in 2020 totalled 7,496 million RMB (\$1,087m or €953m).
- Despite the pandemic, the Chinese market grew achieved revenue growth of 38.6%. Strong demand from end industries drove this, as did government investment in infrastructure such as: wind power, achieving a total capacity of 0.2 billion KW; urban viaduct construction and maintenance projects in tier 1 and tier 2 cities; construction of arts and entertainment venues and urban commercial development.
- With an increased awareness of construction safety, MEWPs are more widely sought after by end users in construction project, as one of the safest modes of access to conduct temporary work at height.



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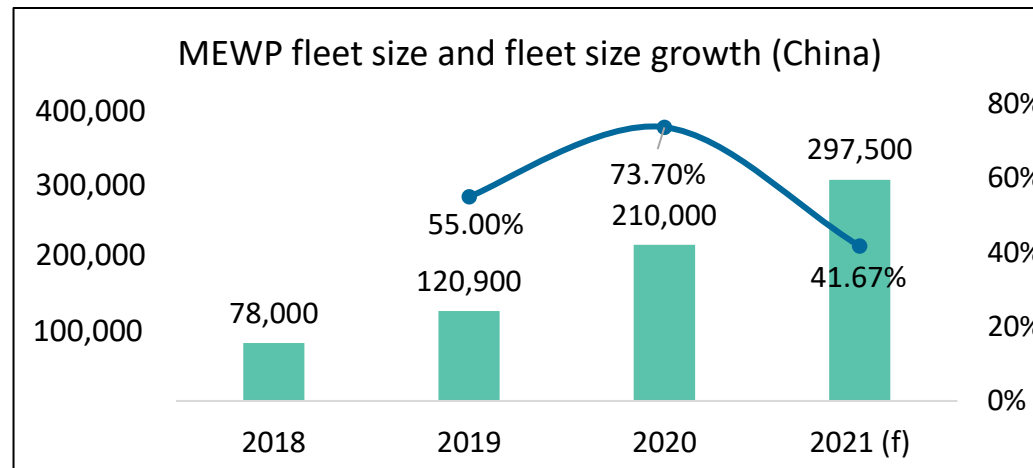
“MEWP rental demand increased in 2020. The number of municipal projects has been increasing. Especially in 2020-21, there are many municipal projects and viaduct construction projects in different regions.”

– MEWP rental company manager

China – market size in units

China's MEWP rental fleet expanded rapidly in 2020 reaching 210,000 units in total. Equipment purchases of major rental companies including Horizon, Zhongneng United and Huatie contributed significantly to this growth.

- Rental companies kept faith in the strong growth potential of the Chinese MEWP rental market, even during the pandemic. Rental companies purchased a large amount of new MEWPs in 2020 to compete for market share.
- In 2021, the fleet size is increasing again, but this might be hampered by manufacturers' increased lead times.
- Based on the market situation of the first half of 2021, the MEWP rental fleet size is expected to be close to 300,000 units at the end of 2021.
- The MEWP rental market has much capacity for growth and is far from saturated. Rental companies expect to keep expanding fleets in the next few years, and the total volume of rental units is anticipated to keep increasing at rates in excess of 20% annual growth.



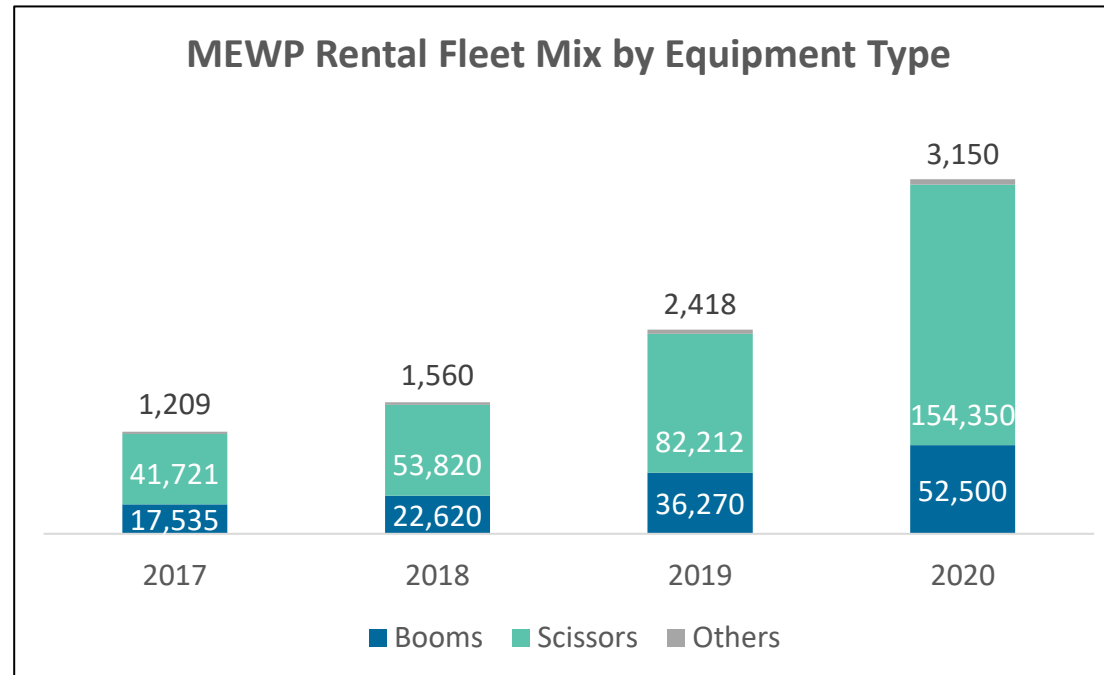
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“Top rental companies are optimistic about the future. They think the market is very promising. Our company invested several billion in 2020 to expand the rental fleet and grab market share, and we keep investing.” – MEWP rental company manager

China – market size in units

Scissors account for the majority share of total MEWP units, being the main equipment of most rental companies owing to the breadth of end-use applications. The boom fleet is expected to grow faster than scissors in future years.

- Scissors heavily dominated the MEWP rental market, with over 70% share in 2020. Respondents indicated that the three biggest rental companies all invested heavily in scissors in 2020.
- The most popular height of scissors in China's rental market is 10-14m, while for booms it is 20-30m.
- Other types of MEWPs such as spider lifts and vertical masts are relatively rare in the Chinese rental market because of the more limited/specialist nature of their application and relatively higher purchasing cost.
- Booms are more profitable than scissors at present, which is expect to attract more rental companies to invest in expanding their boom fleet. Overall growth of booms in the fleet is expected to accelerate from 2021 onwards.

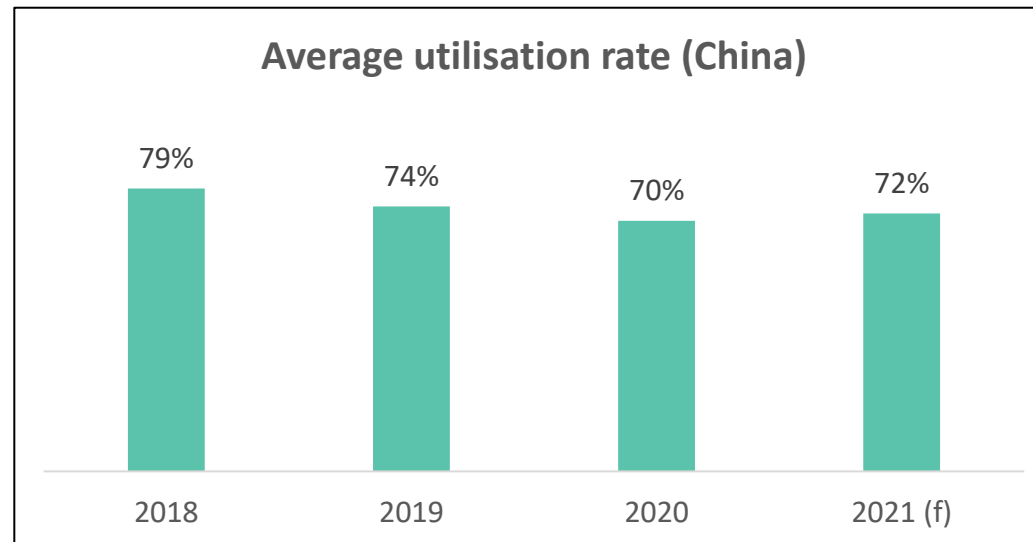


*Included are powered access lifts: All booms, scissor lifts and vertical masts
Excluded: Low-level access equipment (<3m high), telescopic material handlers, forklifts, cranes, and MCWPs.*

China – utilisation rate

The average utilisation rate decreased slightly in 2020. The main impact of the pandemic on utilisation rate was mainly felt in the first quarter of the year. Utilisation rates also varied significantly by region across China.

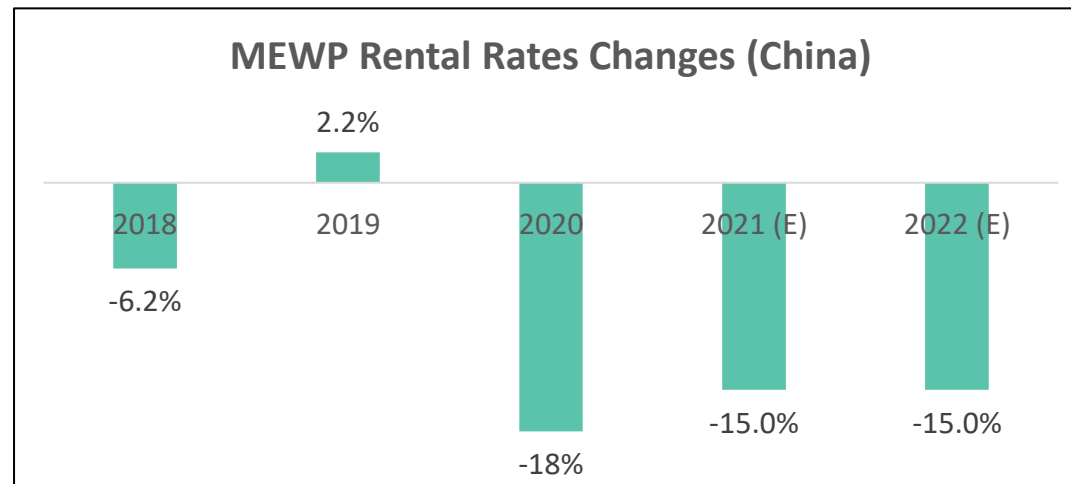
- Owing to the pandemic, average utilisation rates during lockdown dropped drastically to 15-30%. However, as the market recovered from May onwards, utilisation rates recovered to more than 80% during the period Q2-Q4. The average utilisation rate of China's MEWP rental market across the whole of 2020 was estimated to be around 70%.
- In less developed regions such as Shanxi and Gansu, average utilisation rates were likely to be 60-70% because of limited market demand and less awareness of the equipment. However, in hotspots such as cities of the Yangtze and Pearl River deltas, utilisation rates can be higher than 70%, rising to exceed 80% during periods of peak demand.
- Utilisation rates are expected to progressively decline and are likely to settle around 70% as increasing numbers of rental units enter the market and as the MEWP rental industry in China matures. From a typical rental company's perspective, they aim to maintain utilisation rate above 70% to achieve expected returns.



China – Rental rates

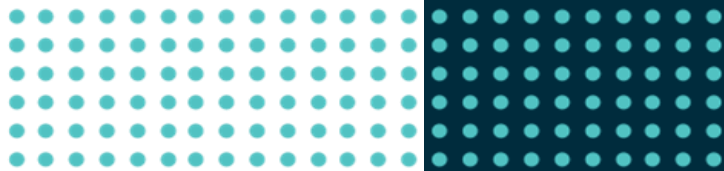
MEWP rental rates fell by 18% in 2020 mainly because of fierce competition, especially between companies at different ends of the size spectrum. As the MEWP rental market grows, rates are expected to keep decreasing.

- The decrease of rental rates was due to strong competition among large rental companies. To seize market share quickly, rental firms invested heavily in new equipment and initiated a price war.
- The decrease of rental rates also has regional differences. Rental rates decreased more in main demand hotspots.
- The decrease of rental rates also varied by MEWP height and type. Overall, 10-12m scissors saw the most significant rates decrease in 2020.
- MEWP rental rates will keep decreasing, as competition becomes ever fiercer over coming years and as the market develops and matures.



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“Prices decreases do not mean the market is becoming saturated. Rather as major rental companies expand their fleets, smaller players reduce rates to remain competitive.” – MEWP rental company manager



A PERSPECTIVE FROM THE EDITOR OF
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IPAF Powered Access Rental Market
Report 2021 – *CHINA*

- The Chinese access equipment rental sector has seen exploded in recent years, with around 40% year-on-year growth even during 2020, leading to an estimated total MEWP rental fleet in excess of 300,000.
- The challenges caused by Evergrande, China's second largest property developer, which is in \$300 billion in debt and at risk of collapse, are not yet fully known. However, it does reflect the borrowing culture that is part of the country's febrile economic climate. The Chinese Government stand ready to intervene to prevent contagion should the company ultimately collapse.
- Outbreaks of Covid-19 have also been affecting the country in recent times, and again it is unclear what the long-term ramifications of this will be to the rental sector, though the relatively minor setback suffered even during the height of the pandemic should mean rental companies remain bullish. The government in China has so far proved quick to act to contain the spread of the virus by imposing strict local or regional restrictions to control any outbreaks as they occur.
- Whatever may be, the rise of the powered access equipment market seems destined to continue apace in China, with the country's total MEWP fleet potentially reaching a similar same size to North America in the next five years.
- One reason why China's access market is likely to buck economic trends in the country is that it is not yet mature, meaning many avenues for growth remain geographically and in sectors beyond construction, such as industrial, maintenance, utilities and retail applications. The country's population of 1.4 billion can also easily accommodate a much larger number of MEWPS, particularly as areas outside larger cities realise the benefits of using powered access equipment.

- An example of the meteoric rise in China can be seen in Access International's 2021 Access50 listing of the world's largest access rental companies. There are three Chinese companies in the top 10 this year, up from one in 2020 and none in 2019. The combined fleet size of those three companies is nearly 122,000 units, which reflects the fact that the market is dominated by a few, very large companies with significant bulk buying power.
- It has led to concerns that rental rates have been forced down as the large players compete for market share, putting pressure on smaller rental companies. Indeed, rental rates are at an historic low in the country and there is a view that they will need to rise to a more realistic level before the market can be considered a fully mature one.
- Growth among Chinese OEMs has been equally impressive, particularly among the major general construction manufacturers in the country, which have set up access divisions in recent years. Among them, XCMG, LGMG and Zoomlion have become major players in a short amount of time.
- The growth of the largest Chinese OEMs and rental companies has been assisted by major supply deals between themselves, which only increases the challenge for access equipment manufacturers based in North America and Europe.
- As in many other MEWP markets, there is a strong focus on electric-powered equipment in China, and there is a belief that the country will skip hybrid equipment altogether and move quickly into lithium-ion-powered rough-terrain equipment, while providing the onsite charging capabilities that are required, all of which will be encouraged by the Chinese authorities.



APPENDIX
IPAF Powered Access Rental Market
Report 2021 – *CHINA*

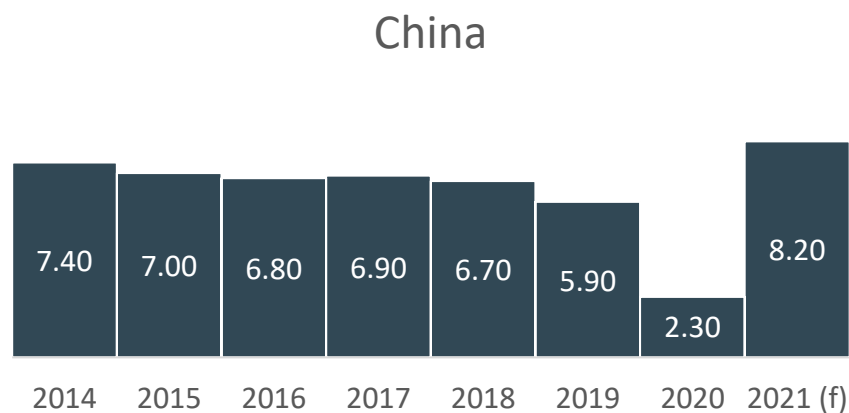
- Exchange rate:
 - The currency exchange rate used for the China is shown below. The same rate has been used throughout the time period (from 2017) in order to eliminate variation owing to exchange-rate fluctuations rather than the dynamics of the MEWP rental market.

	Currency Unit	Converter to Euro
China	CNY	0.1312

China – Macro-economic indicators

GDP per capita is expected to steadily increase over the next few years in China. The country's MEWP rental market is expected to follow a similar positive trend for at least the next five years, as demand continues to rise.

- After a significant blip in terms of total output in 2020, owing to the ongoing geo-political and economic impacts of the pandemic, China's GDO is expected to more than compensate during 2021, forecast to grow by more than 8%.



*Gross Domestic Product (GDP), Real %YOY -
FrontierView, Sept 2021*



RESEARCH & CONSULTING

October 2021

IPAF powered access rental market report 2021

COUNTRY REPORT – Middle East
(UAE, Saudi Arabia, Qatar)

www.ipaf.org/reports



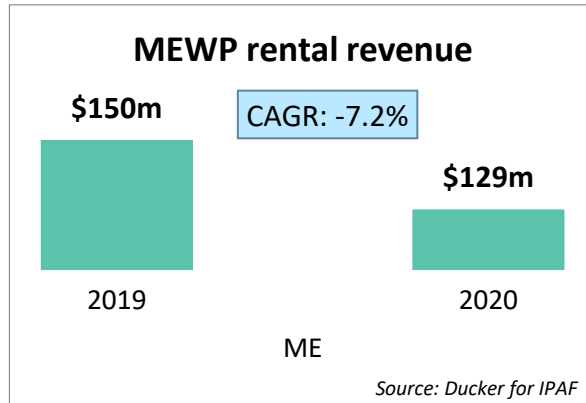
THE EUROPEAN
ASSOCIATION
AWARDS 2018

BRONZE
Best Provision of Industry
Information and Intelligence

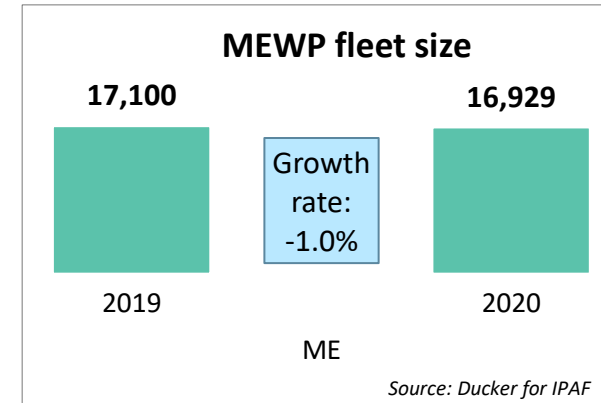
IPAF has been working with Ducker to create these exclusive
industry reports since 2009

Middle East – key findings

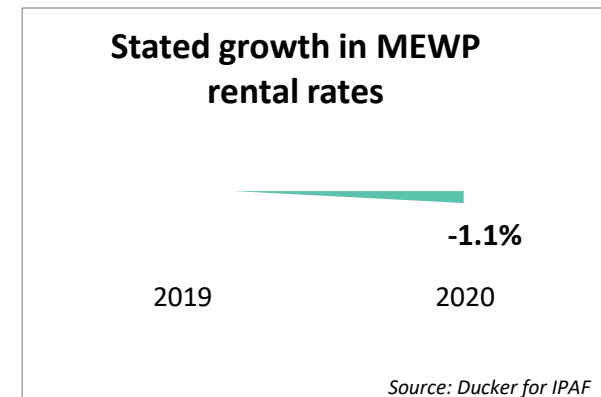
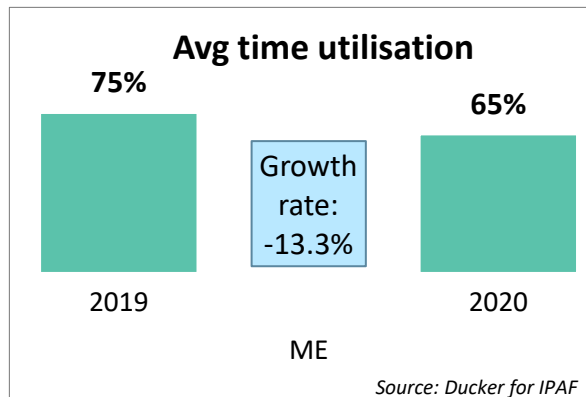
As with pretty much everywhere in the world, most Middle-Eastern countries were impacted by the pandemic, seeing a drastic drop in revenue between 2019 and 2020, owing to postponement of major construction projects.



CAGR: Compound annual growth rate



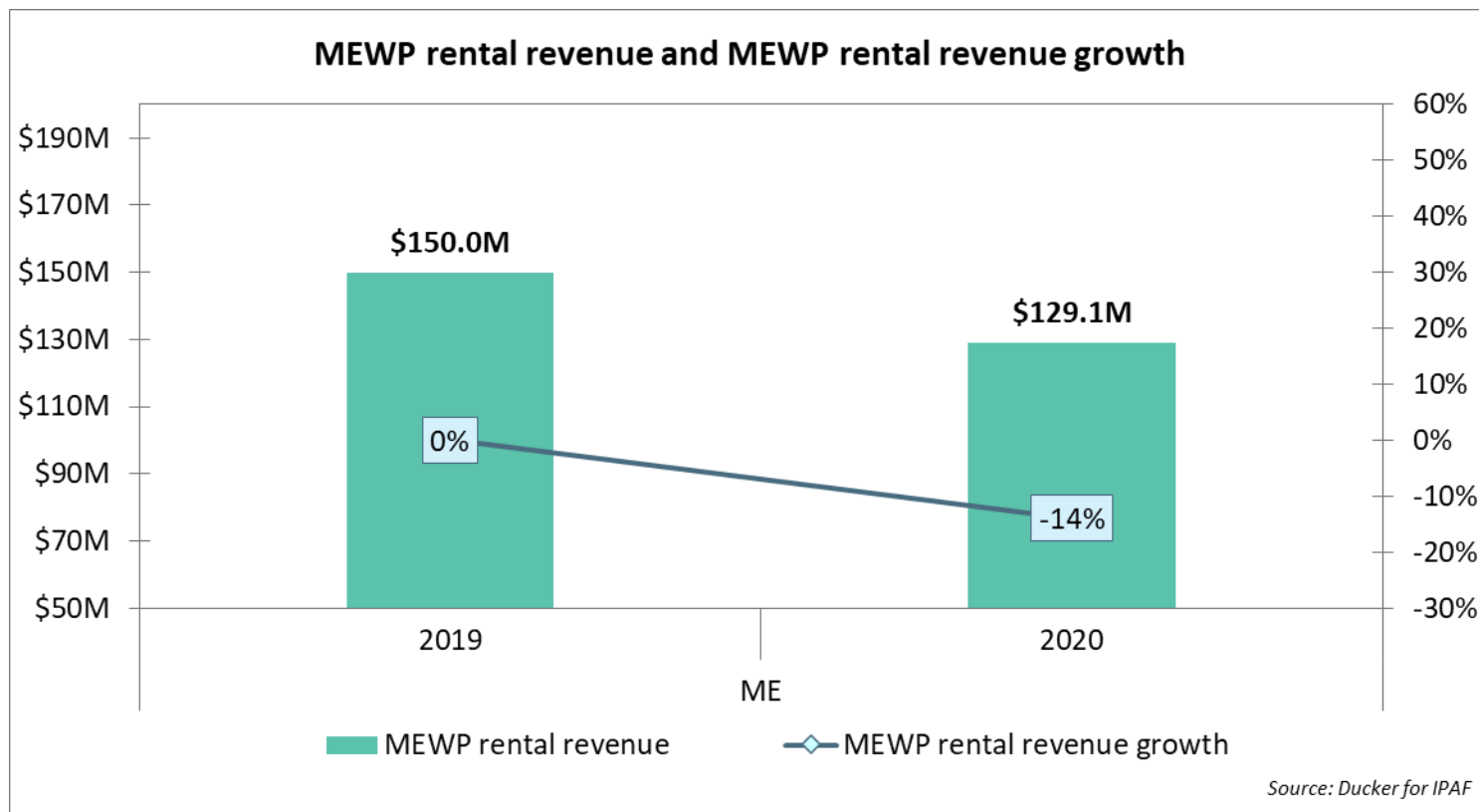
- In all three countries under study (UAE, KSA, Qatar), MEWP rental revenue dropped more than 10% across 2020 as a whole.
- The fall in revenue was a product of slides in average utilisation rate, fleet size and rental rates, which all decreased significantly owing to end-use demand falling during the peak months of the pandemic.



Middle East – rental market value and growth

Overall revenue in the Middle East has decreased by 14%, but the impact was particularly severe in Saudi Arabia, which was more impacted than either the UAE and Qatar.

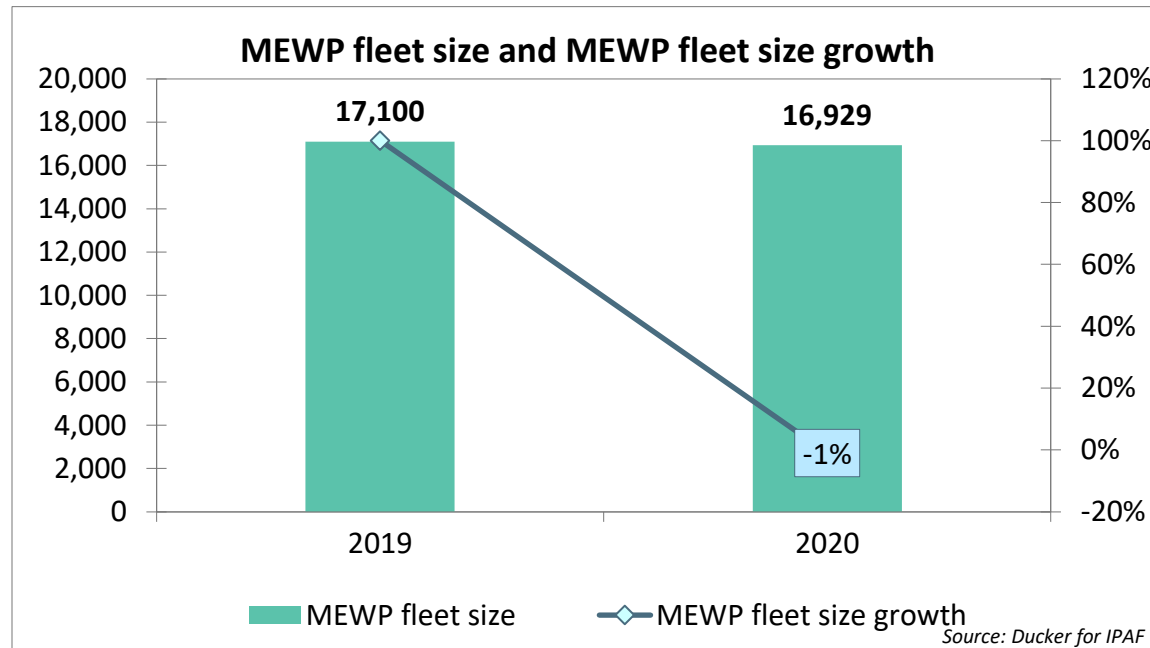
- MEWP rental revenue was greatly impacted by the pandemic in all three countries under study in 2020, with combined annual revenue falling beneath the \$130 million mark, down from \$150m in 2019.
- In 2021, revenue is expected to grow, though at varying speeds depending on the country: Qatar in particular is expecting rapid growth as the market expands, compared to KSA, which was already a more mature market.



Middle East – market size in units

MEWP fleet size was slightly reduced in 2020 compared to 2019, it is likely this minimal defleeting took place to allow rental companies to avoid maintenance costs and mitigate the fact that utilisation rates were dropping.

- In 2020, the total fleet size in the three countries under study fell by around 1%, mainly because rental companies said they sold some of their machines into the used MEWP market in line with overall falls in activity/demand.
- In 2021, companies did not expect to buy many new machines or increase their fleet size, preferring instead to prioritise increasing utilisation rates. Companies will also consider the used equipment market over new MEWPs.



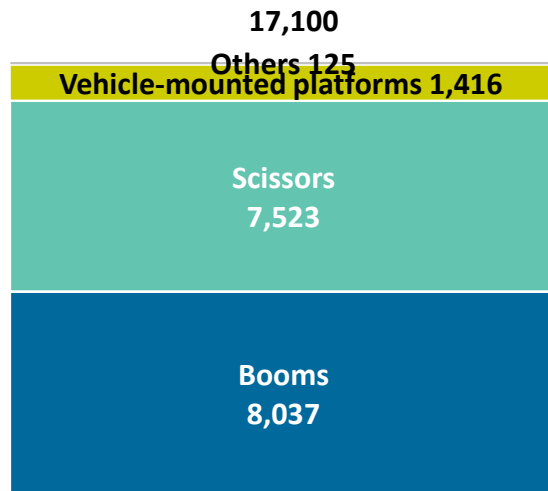
*Included are powered access lifts: All booms, scissor lifts and vertical masts
Excluded: Low-level access equipment (<3m high), telescopic material handlers, forklifts, cranes, and MCWPs.*

Middle East – market size in units

There is a total rental fleet of around 17,000 machines across the three Middle East countries under study, the vast majority of which are booms. There is a particularly high proportion of straight booms over articulated machines.

- Particularly in Qatar and UAE straight booms are popular among rental companies because of their use in constructing and maintaining tall buildings, a significant share of typical applications in those countries.
- In 2020, fleet mix remained pretty much unchanged from previous years; it is expected to remain similar in 2021.

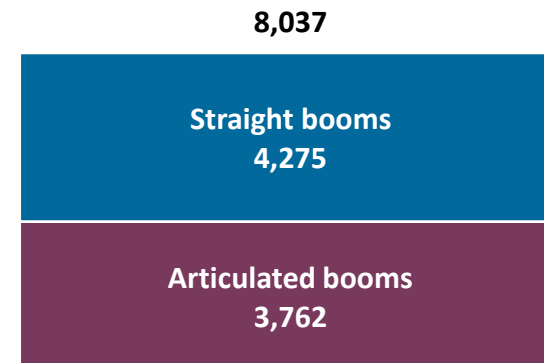
MEWP rental fleet mix by equipment type



2020

Source: Ducker for IPAF

MEWP rental boom fleet mix by equipment type



2020

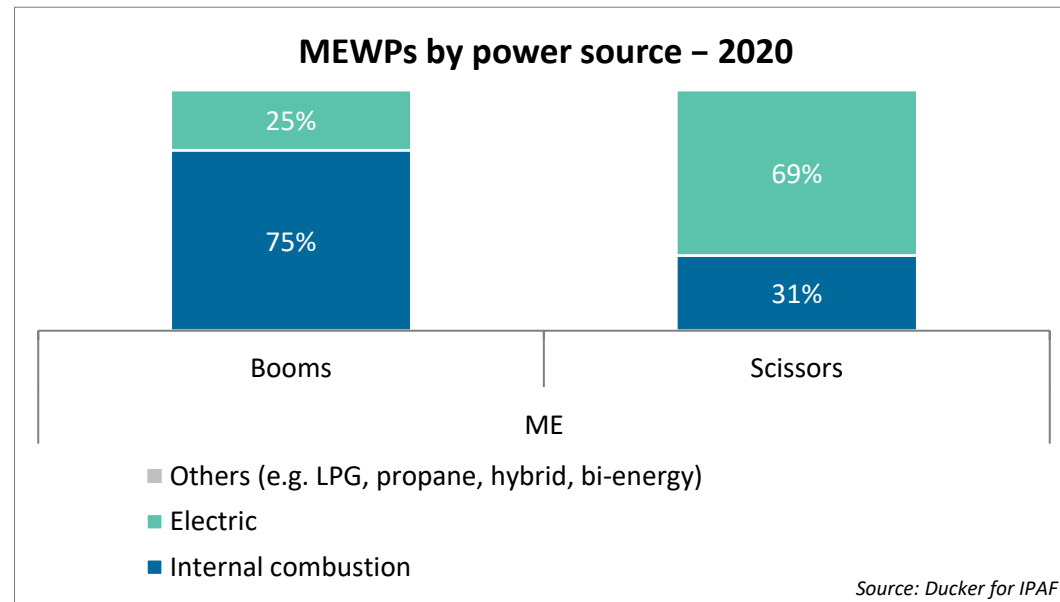
Source: Ducker for IPAF

Included are powered access lifts: All booms, scissor lifts and vertical masts
Excluded: Low-level access equipment (<3m high), telescopic material handlers, forklifts, cranes, and MCWPs.

Middle East – power sources

In the three countries under study, diesel-powered equipment represented 75% of booms and 31% of scissors in 2020. This is largely in line with the US and reflects the more typical demand for scissor lifts in indoor applications.

- Diesel booms still represent the large majority of the MEWP rental market in all three countries under study, which all have a long tradition of being built using internal combustion-powered equipment. Oil-derived fuels are still comparatively very cheap in the region as a whole.
- Rough terrain and high temperatures are major obstacles to making the transition towards all-electric machines.
- Electric-powered equipment is expected to grow steadily from 2021, marking the beginning of a long-term shift.



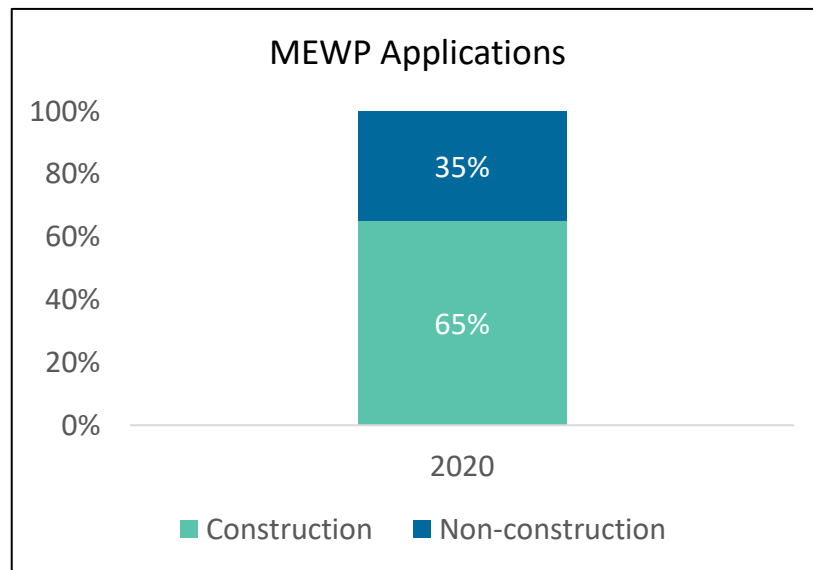
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“We only use electric machines for indoor use. We have some hybrid solutions for outdoor applications, but overall these are still a very small share of our fleet.” – MEWP rental company purchasing manager.

Middle East – applications

Construction represents 65% of the overall MEWP rental market in the three countries under study. Major projects such as Expo 2020 in Dubai and the FIFA World Cup in 2022 in Qatar have been driving huge demand in the region.

- Construction was and remains the main application for MEWPs in 2020, accounting for between 60% and 70% of total applications in the UAE, KSA and Qatar.
- With the FIFA World Cup 2022 in Qatar, the country has an even higher share of construction compared to other applications. Construction pipeline was held up in UAE, for example on the delayed Expo2020 project.
- Commercial buildings are the main construction sub-sector, before residential and industrial buildings.



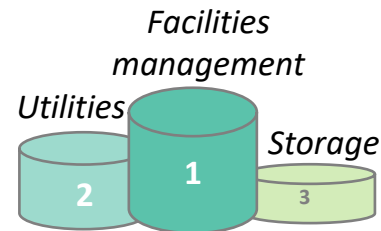
Share of rental revenue:

Non-construction includes industry, maintenance, cleaning, utilities, events.

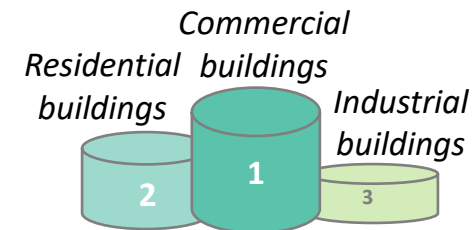
Construction includes new-build and renovation; including residential, commercial, retail and industrial.



Main non-construction sub-sectors



Main construction sub-sectors

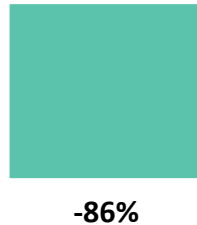


Middle East – equipment purchases

Equipment purchases were reduced in 2020 in all three countries under study, as most rental companies adopted an overall cautious investment strategy. Few if any companies expanded fleets, while some even reduced fleet size.

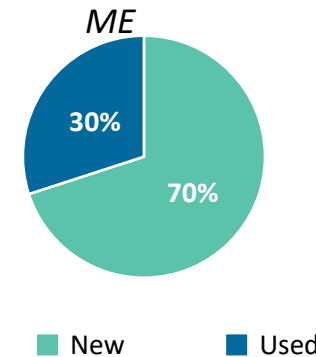
- Investment by rental companies was scaled back by 86% in 2020, with most halting investment in new machines, and also pausing renewal of machines, and some even selling off surplus machines to maintain utilisation rates.
- Investment in 2021 remains below where it might have been expected to be had the pandemic not happened in KSA, but is growing again in UAE and Qatar, as catch-up on delayed construction projects reinvigorates demand.
- Some rental companies reported buying an increasing number of used machines rather than new ones, because of the growing cost and longer lead times of new machines: 30% of purchases were on used equipment.

Investment in new MEWPs in 2020



Source: Ducker for IPAF

MEWP Equipment Purchases (% of units) – 2020



Source: Ducker for IPAF

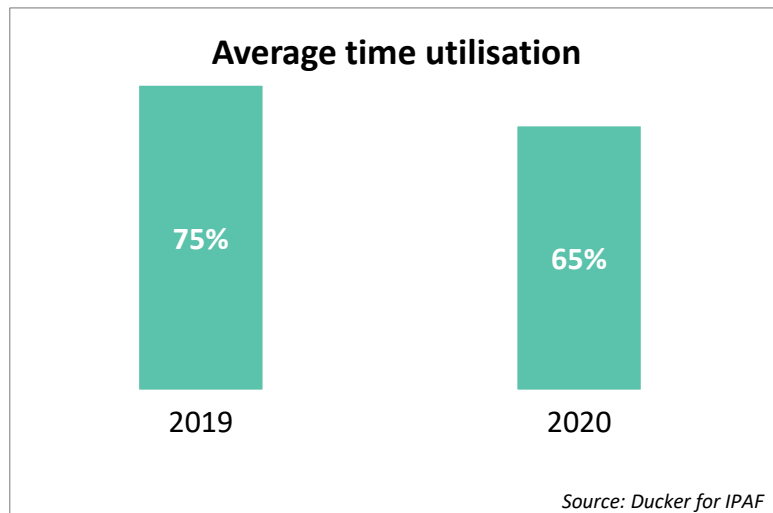


“We will slowly increase investment in 2022 by expanding the fleet again. We paused it during Covid, and it will come back, though is likely to build up slowly.” – MEWP rental company investment strategist.

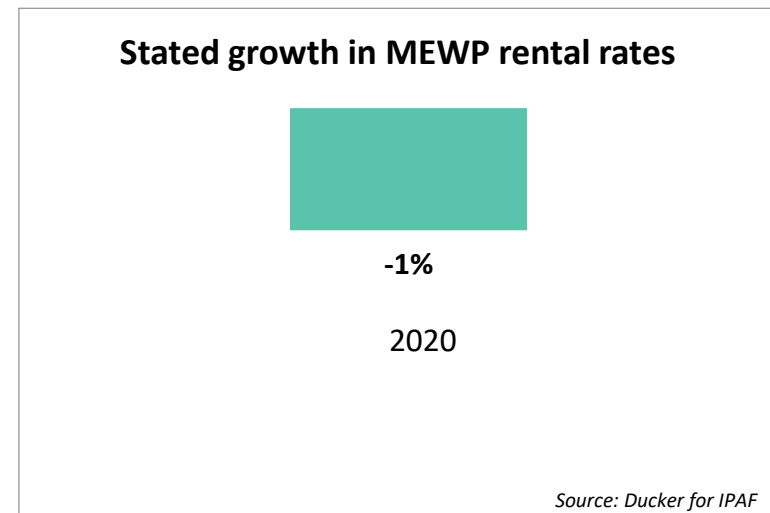
Middle East – utilisation rates and rental rates

In all three countries under study, the average utilisation rate has dropped by at least 10 percentage points, whereas rental rates also decreased, though to a lesser extent and also by varying degrees depending on the country.

- Average utilisation rate was considerably reduced, by around 12% in KSA, and 8% in UAE and Qatar, owing to the reduced activity during the peak of the pandemic. Utilisation rates are expected to return to pre-covid levels, to above 70% in all three countries, by late 2021 or during 2022. This rate is higher than in most European countries.
- Rental rates remained stable in KSA and Qatar, but continued to fall in UAE, where competition has become fiercer in the past few years, coupled with increased price pressure during the pandemic. Rates are expected to remain stable in 2021 in all three countries.

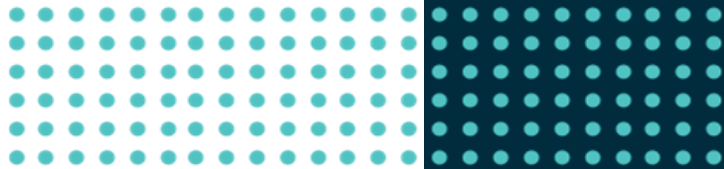


Definition: Physical number of machines out on hire as % of total number in fleet at any given time.



“

“In UAE, we had to reduce the prices to get some activity back. It was easier in Qatar, where prices were kept more often.” – MEWP rental company hire manager



A PERSPECTIVE FROM THE EDITOR OF
ACCESS INTERNATIONAL MAGAZINE
IPAF Powered Access Rental Market
Report 2021 – *MIDDLE EAST (UAE, Saudi
Arabia, Qatar)*

- The economy of the nations in the Gulf Co-operation Council (GCC) varied significantly over the Covid-19 pandemic, although in a general sense the economy is picking up across the region.
- For example, the United Arab Emirates (UAE) economy is set to grow by more than 2% this year and 4.2% in 2022. Apart from recovery within the domestic market, tourism has also picked up in recent months.
- As a sign the region is moving back to normality, Expo 2020 finally opened in Dubai at the beginning of October 2021, following the year-long delay caused by the pandemic. The world fair-style showcase will run through to March 2021. Estimates suggest the Dubai Government spent around \$7 billion on the building and hosting event. With a possible 25 million visitors expected to attend over the course of the Expo, and the potential investment they will bring, a major and sustained boost to the economy is anticipated.
- One of the main challenges in the more developed rental markets of GCC has been the number of new competitors that have entered the area in the last seven years or so, in the lead up to the Covid pandemic. For example, in the UAE there were delays to some major projects that were expected to provide a large amount of work for the rental companies entering the country. This put a strain on those companies that were already there.

- With a high proportion of the machines in MEWP fleets being bought as used equipment in the region, one of the knock-on effects of the pandemic is that it is likely to delay the adoption of newly bought equipment. A two-day auction, which took place in March, saw around 1,470 registered bidders from 105 countries purchase more than 1,380 pieces of equipment.
- While the impact of Covid-19 is likely to be partially responsible for the rise in bidders, Ritchie Bros' fully integrated demographic targeting strategies and digital marketing campaigns played a key role driving the auction's success.
- As with all regions across the world, some nations have more developed rental markets than others. However, this can be a positive. Where, for example, the UAE or Dubai has seen lower rental rates resulting from increased competition, entering a neighbouring country where there is less competition in a much smaller MEWP rental market can be an attractive option.
- For example, Oman, which still has a relatively small equipment rental market, has seen interest from established rental companies in the UAE as somewhere they can take establish higher rental rates. This, in turn, will be a factor in helping to develop rental markets in places such as Oman, opening further scope for investment and expansion.



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October 2021

IPAF powered access rental market report 2021

COUNTRY REPORT – France

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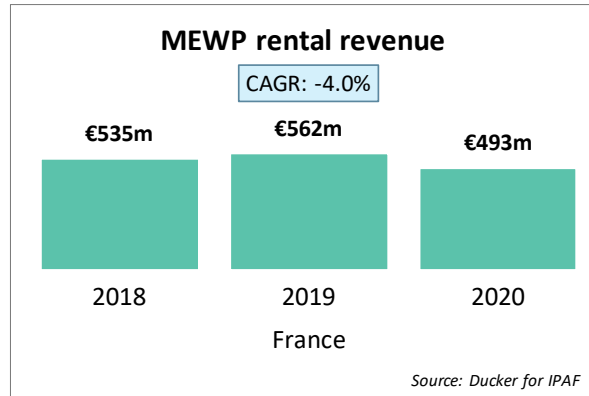
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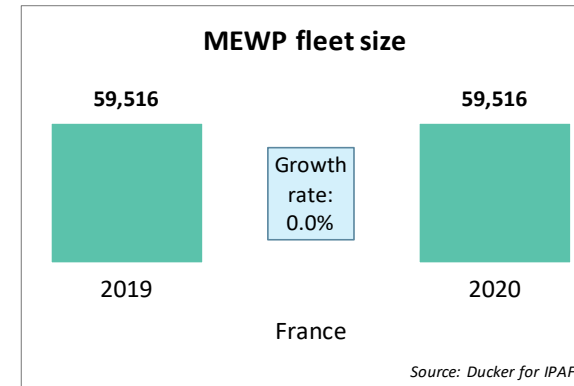
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France – key findings

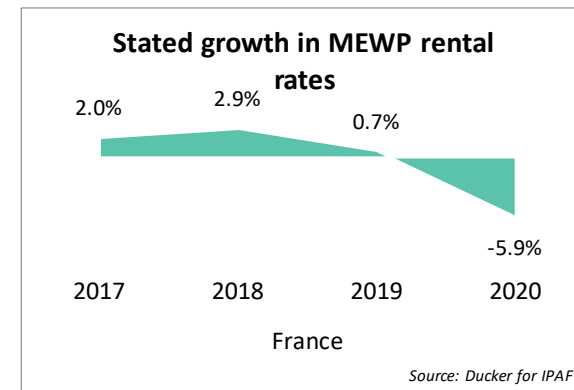
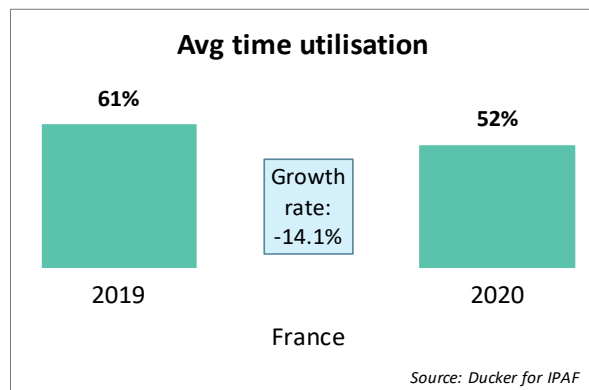
Like most countries under study, French MEWP rental revenue experienced a downturn in 2020, driven by a fall in both utilisation and rental rates. Overall rental revenue fell by 12%, driven by a strict three-month national lockdown.



CAGR: Compound annual growth rate

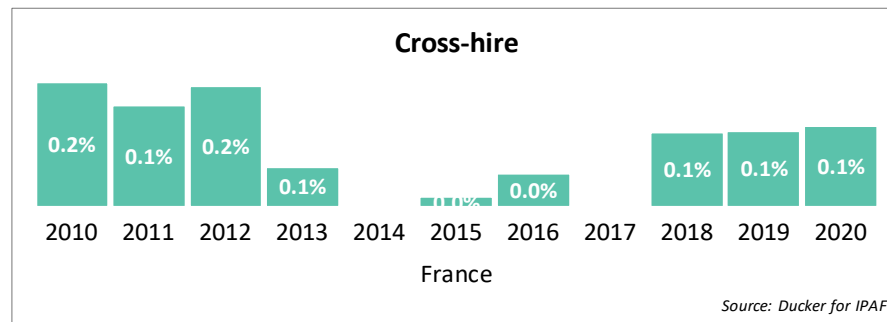
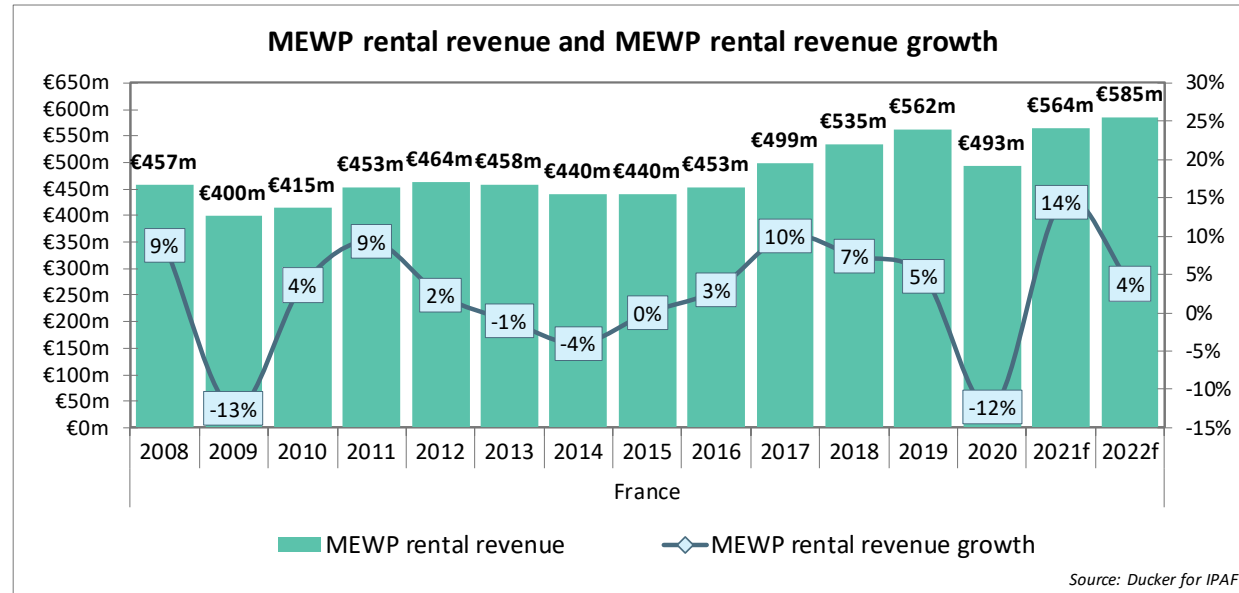


- MEWP rental revenue dropped by 12% between 2019 and 2020, the direct consequence of the strict national lockdown that occurred between February and May 2020, affecting all end-sectors.
- Fleet size remained stable, however, with most rental companies considering 2020 as an exception and anticipating that activity would largely return to normal in 2021.



France – rental market value and growth

The MEWP rental market shrank by around 14% in 2020 as a whole, but should recover in 2021 and even exceed levels seen before the pandemic as demand returns and catch-up on construction pipeline continues.

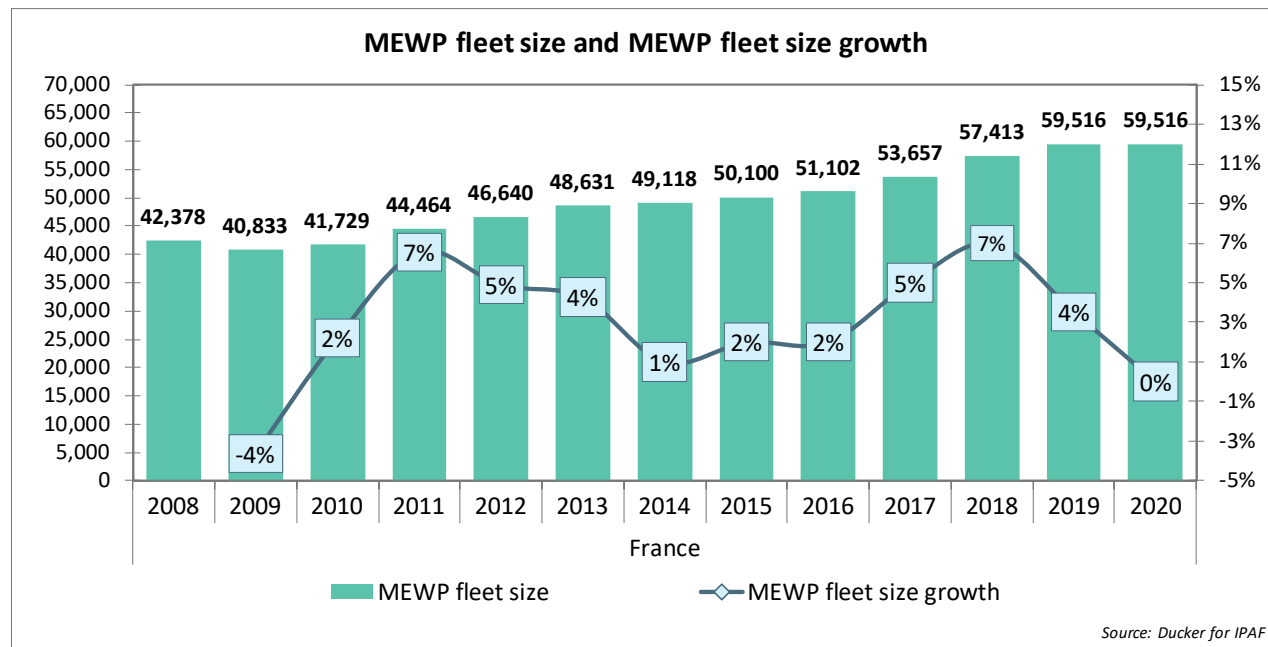


- Rental revenue fell below €500m, owing mainly to national lockdowns and coronavirus restrictions; activity stopped for several months Feb-May 2020.
- Rental companies are optimistic on the whole about their 2021 revenue, which is expected to exceed 2019.
- Cross-hire is almost non-existent in France and this is not expected to change in future years.

France – market size in units

French rental companies did not seek to downsize or defleet during the worst of the pandemic in 2020, despite a lockdown between February and May that shut sites and curtailed activity, which had largely recovered by year-end.

- There was no evidence of defleeting among French rental companies in 2020. Even though strict lockdowns were in force Feb-May, most rental companies expected the market to be back to business as usual by the end of 2020.
- In 2021, investment that was planned for 2020 but postponed owing to Covid will have an impact on average fleet size, which is expected to grow by 2-3%.

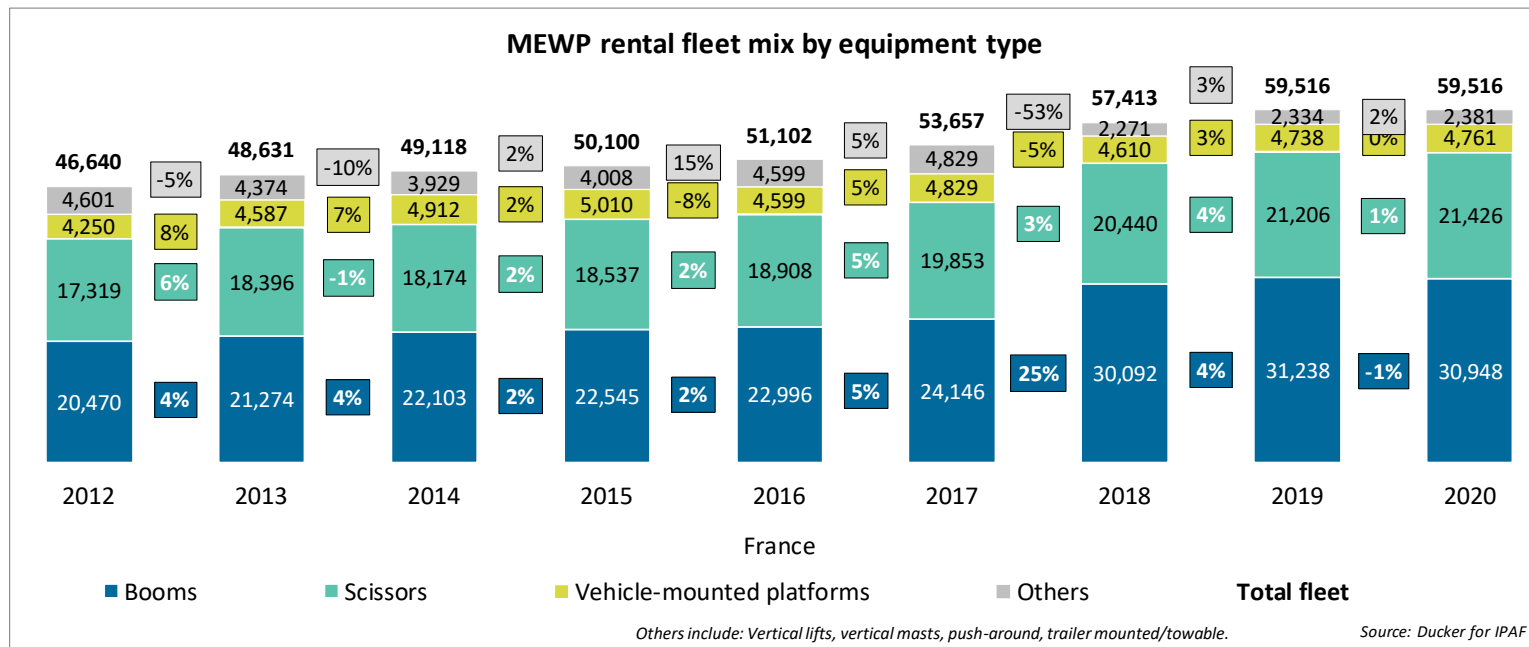


Included are powered access lifts: All booms, scissor lifts and vertical masts
Excluded: Low-level access equipment (<3m high), telescopic material handlers, forklifts, cranes, and MCWPs.

France – market size in units

As the fleet size was kept stable in 2020, there was little variations in the fleet mix. Medium to long-term the trend is towards electric-powered equipment replacing older, diesel-powered machines as the renewal cycle allows.

- In 2020 the typical equipment mix remained unchanged compared to 2019. The main type of machines that companies got rid of were older diesel-powered booms, as the trend to replace these with electric ones continued.
- In 2021, articulated booms, driven by the rebound in construction, and electric scissors, pushed by the clean-energy transition, are expected to be the two equipment types that companies look to increase in their fleets.



Included are powered access lifts: All booms, scissor lifts and vertical masts
Excluded: Low-level access equipment (<3m high), telescopic material handlers, forklifts, cranes, and MCWPs.

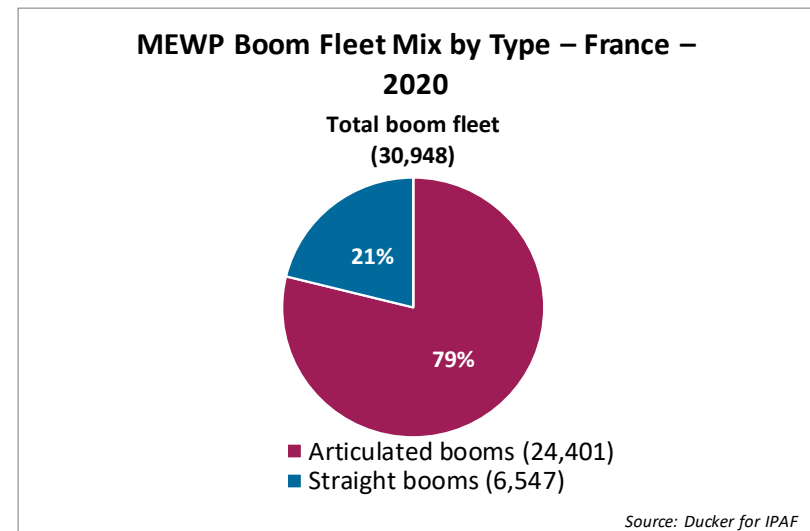
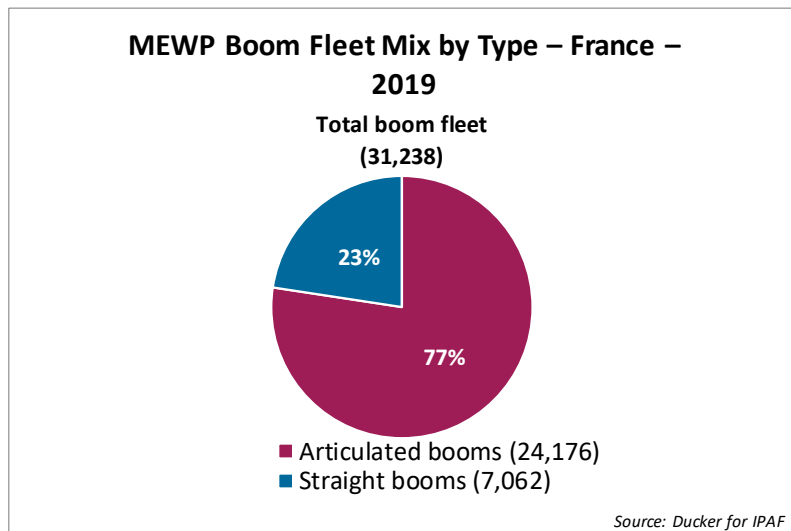
+X%

% unit growth, eg both scissors and booms fleet increased by 7% from 2017 to 2018.

France – market size in units

There was a slight reduction of booms in 2020, with the proportion of the fleet that is straight booms falling from 23% in 2019 to around 21% at the end of 2020. This was mainly owing to the enforced downtime in construction.

- In 2020, with a pause on construction during lockdown, demand for booms fell, especially high diesel-powered straight booms. Older diesel-powered straight booms were more likely to be retired and not renewed in the fleet.
- The articulated booms fleet is expected to have grown in 2021, many companies say they are replacing some of their older diesel-powered machines with electric ones, as well as growing their fleet to meet construction demand.



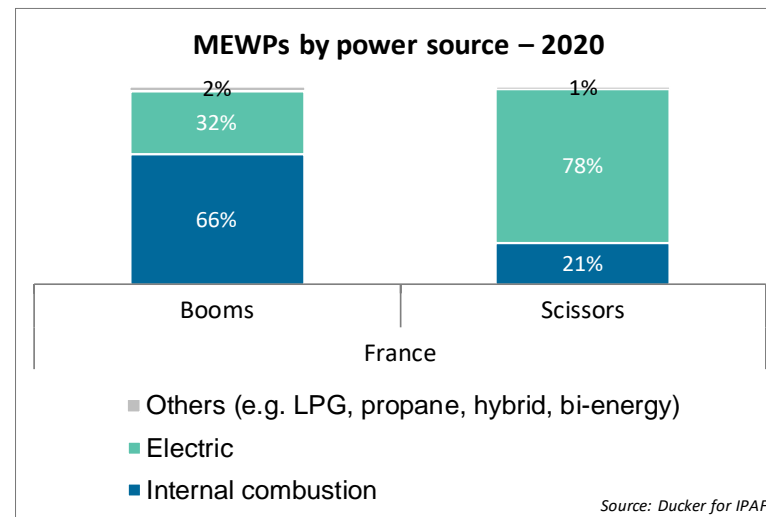
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“Construction is getting healthier and there is a growing demand for the higher articulated booms [16m and above].” – MEWP rental company hire controller

France – power sources

The blend of boom power sources hasn't changed much in 2020, owing to the slowdown and the effective pause on investment in new equipment, other than for organic renewal. Transition to electric has continued for scissors.

- Electric booms represent 32% of all booms, which is similar to the levels in 2019. The transition to green power sources continued for scissors, with the overall percentage of electric machines gaining 2% compared to 2019.
- In 2021, companies continue to switch towards electric power sources, driven by strong demand from customers, especially on major construction projects.
- Purchasing price remains the primary barrier for the wholesale adoption of hybrid and electric equipment: The general trend towards electric-powered machines is being driven mainly by the larger rental companies.



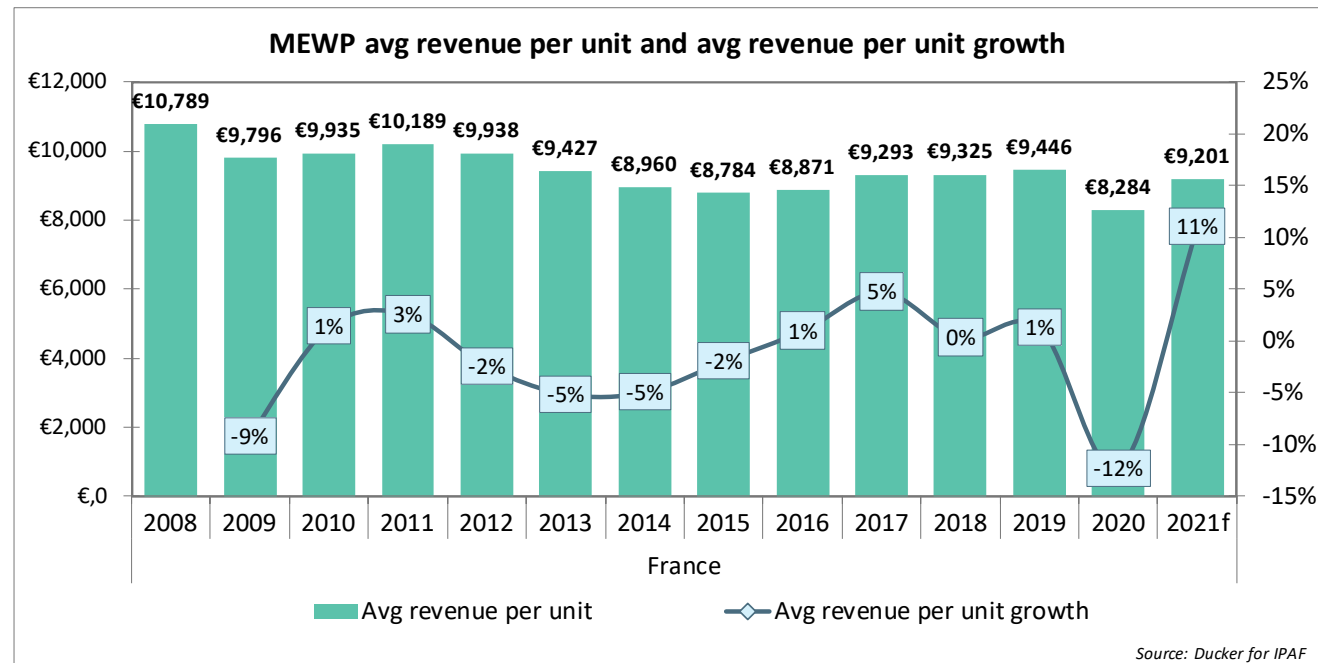
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“Since last year there has been a clear shift in attitudes and now clearly stated objectives are published by our clients in terms of demand for green machine types” – MEWP rental company manager

France – revenue per unit

The average revenue per unit dropped significantly in 2020, and though it is expected to bounce back in 2021, it is not expected to regain 2019 levels until 2022 at the earliest.

- Owing to decreased revenue caused by significant falls in rental rate and the decision of most companies to retain their fleet, average revenue per unit in 2020 dropped by 12%.
- In 2021, revenue is expected to grow significantly compared to 2020, but rental rates are not expected to return or surpass pre-pandemic levels, meaning average revenue per unit will not rebound to 2019 levels by the end of 2021.

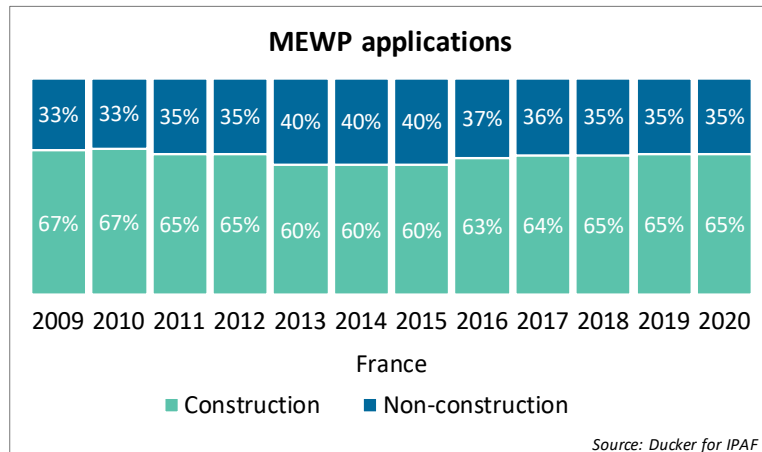


Included are powered access lifts: all booms, scissor lifts and vertical masts
Excluded: low-level access equipment (<3m high), telescopic material handlers, forklifts, cranes and MCWPs.

France – applications

The split between construction and non-construction has not changed between 2019 and 2020, but a strong bounce-back in construction as pipeline is caught up and work resumes on major projects could see a future shift.

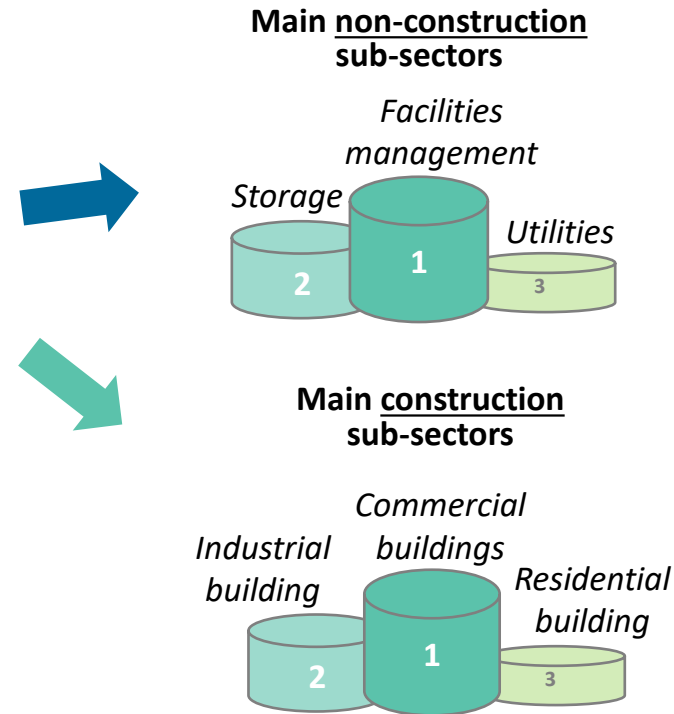
- Both construction and non-construction sectors were hit by the lockdown in France during 2020, construction being stopped during lockdowns, and non-construction sectors slowed down all year.
- With delays affecting construction sites such as for the 2024 Olympic Games and the Grand Paris unified conurbation project, construction rebounded strongly in 2021 as efforts are made to catch up on pipeline.
- Even though industry returned to growth in 2021, it isn't likely to be as strong as the construction sector.



Share of rental revenues:

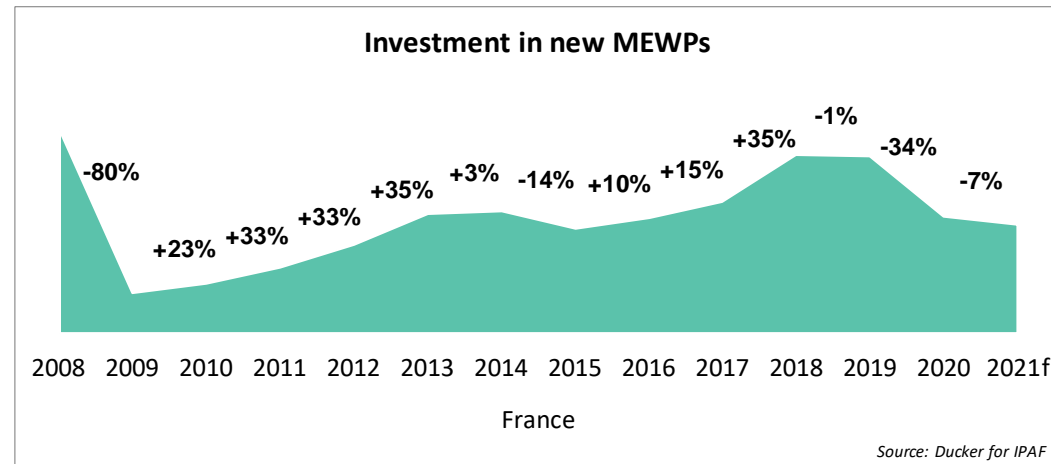
Non-construction includes industry, maintenance, cleaning, utilities, events.

Construction includes new-build and renovation; including residential, commercial, retail and industrial.



Investment fell significantly in 2020, mainly owing to the pandemic and associated slowdown in economic activity and rental demand. Some rental companies opted to split committed equipment orders between 2020 and 2021

- In 2020, investment dropped by 34% compared to 2019: Some investment was sustained and new equipment was received in the beginning of 2020, but a significant portion of existing orders were postponed to 2021.
- Rental companies stay cautious on their investments, and plan to wait for 2022 to get back to pre-pandemic investment practices.

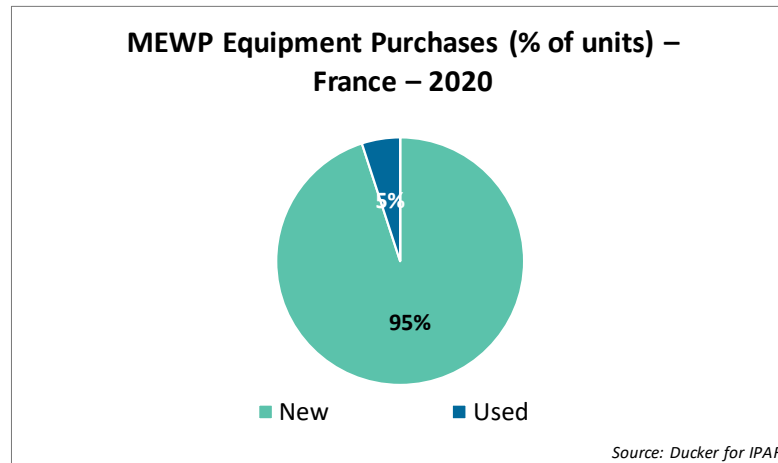


“We decided to split our purchases between 2020 and 2021 to avoid a financial gap and buying new machines when the activity is coming back. Investments will be higher in 2022” – Rental company purchasing manager

France – equipment purchases

In 2020, purchases of used equipment increased slightly compared to 2019. Smaller rental companies decided to offset falling revenue per unit by saving money buying under-utilised MEWP units from larger companies.

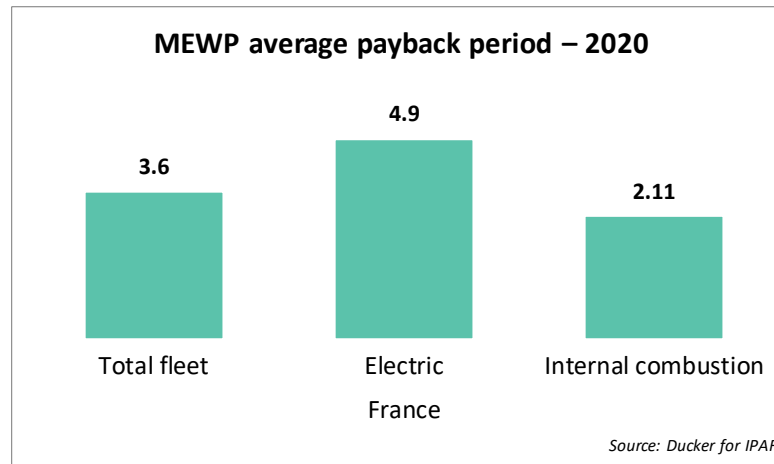
- Even though the purchase of used equipment is not traditionally very common in the French market, some smaller rental companies decided to acquire used machines rather than invest in new machines during 2020, which had a slight impact on the share of used equipment, increasing it marginally to 5% of total equipment purchases for the year. It remains to be seen, with increased lead times and some supply chain issues whether this trend will be reversed during 2021.



France – typical payback period

The average payback period in 2020 was 3.6 years, an increase on typical ROI period from 2019 owing mainly to the significant fall in rental rates due to France's national lockdown during the pandemic.

- The average payback period has been impacted by the drop in rental rates, which led to an increase in ROI for both electric and internal-combustion-powered equipment, from 3.3 years in 2019 to 3.6 years in 2020.

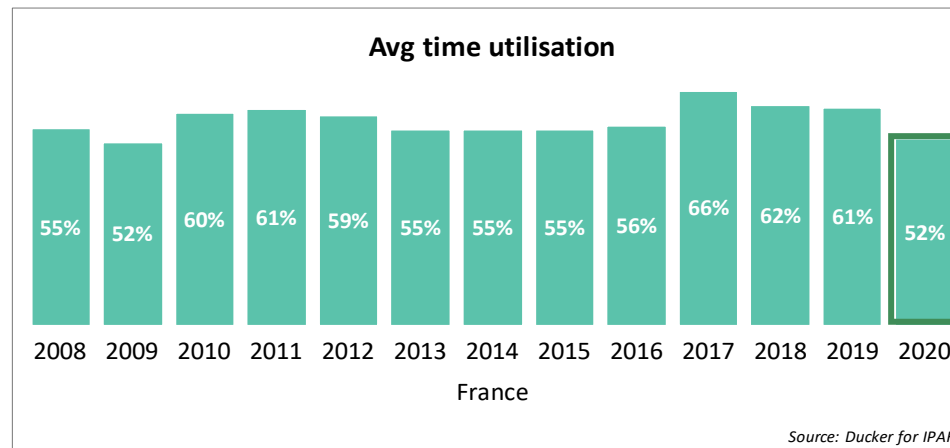


4.9 = 4 years and 9 months

France – utilisation rates

Utilisation rate fell by 9 percentage points between 2019 and 2020, to stand at 52% for 2020 as a whole. Most European countries under study operate at an optimal utilisation rate of 60-70%, though there is optimism this will recover.

- With a two-month pause in activity during the lockdown, the overall utilisation rate dropped significantly in 2020. Despite this, activity rebounded sharply from the end of last year, which allowed rental companies to avoid falling below 50% utilisation rate.
- In 2021, utilisation rate is expected to return to 2019 levels, to around 61%. There is a fear that materials supply chain problems will impact the construction sector, but it remains to be seen how significant this will be.



Scissors:
53%

Booms:
51%

Definition: Physical number of machines out on hire as % of total number in fleet at any given time.

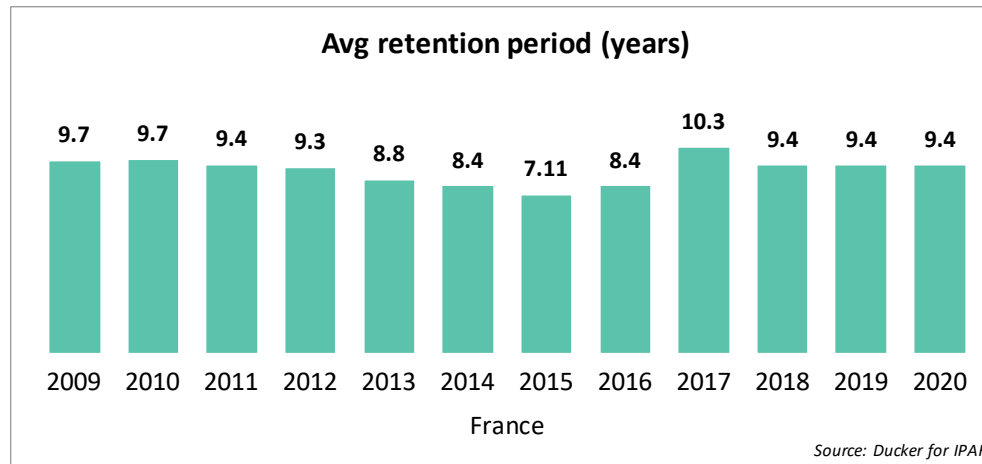


“We are optimistic about our utilisation rate. Unless any material shortages come our way, we should see a return to optimal utilisation rates for 2021.” – MEWP rental company manager

France – retention period

The average retention period of machines held steady during 2020, to stand at just under ten years before equipment is scheduled to be replaced.

- As rental companies decided for the most part to maintain fleet levels despite the effects of the pandemic, the average retention period wasn't impacted in 2020, and remains at around 9.4 years per unit. This is higher than some European markets but in line with others.



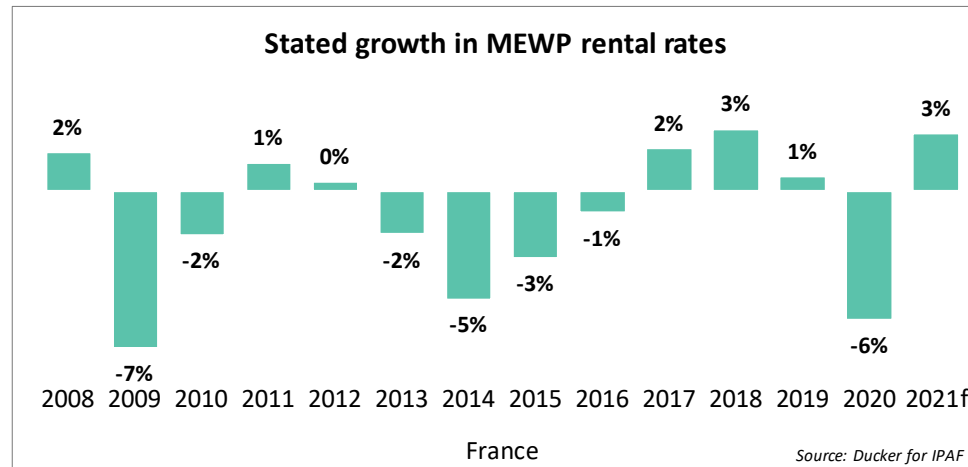
9.4 = 9 years and 4 months

Definition: Period of time that a machine is kept in fleet = selling age if acquired new

France – rental rates

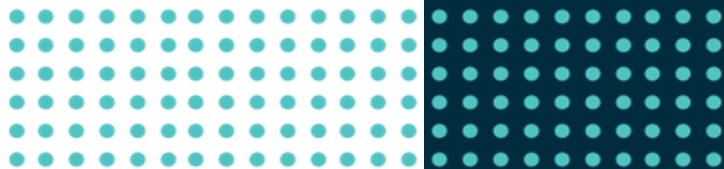
With a prolonged market shutdown in France, MEWP rental companies opted to cut prices in order to recoup some of the losses sustained February-March. This led to an industry price-war, which saw rental rates drop by 6% across 2020.

- After the lockdown in 2020, rental companies tried to clawback as much activity as they could to compensate for their losses. This led to a price war at the end of 2020, as competitors needed to align to retain market share.
- With activity resuming in 2021, prices have rebounded to a certain extent, but remain lower than they were in 2019.



“

“Some of us didn’t want a war on price, but it was inevitable, as it was the only way to get the activity back on track.” – MEWP rental company market strategist



A PERSPECTIVE FROM THE EDITOR OF
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IPAF Powered Access Rental Market
Report 2021 – *FRANCE*

- According to the European Rental Association (ERA), France's rental activity dropped by 14% in 2020, making it one of the steepest falls in Europe. However, as with other the countries that suffered the most last year, the recovery in France has been dramatic, and the ERA now expects the country's rental revenue to grow by 9.5% this year.
- Another recovery indicator comes from French rental and distributor association DLR. It reports that the country's equipment rental sector activity increased 15.6% in the first quarter of this year over the first quarter of 2020. The quarter was also 2.3% higher than the final three months of 2020, even as France was seeing further lockdowns during the early part of the year.
- In its quarterly Barometer, DLR adds that the recovery is not an even process, with cycles of collapse and recovery, depending on national and regionalised lockdowns. However, it added: "The magnitude of these variations is less and less strong, as companies have become accustomed to living, or rather working, with the virus."
- The report highlights other positive findings, with hiring and investment intentions close to historic highs in all three sectors of rental, material handling and equipment sales.
- Rental giant Loxam's French business also recovered well in the first quarter of 2021, returning to pre-crisis levels, reflected by a 13% increase in year-on-year sales. Reiterating the situation, Gerard Déprez, CEO of Loxam, commented: "Going forward, we expect the construction sector to rebound, and we intend to take advantage of this recovery to continue our growth."

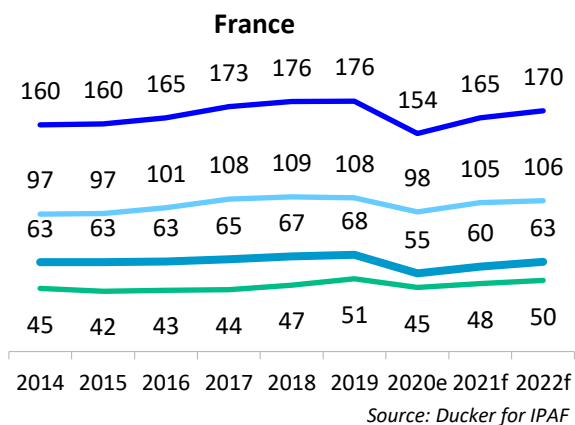
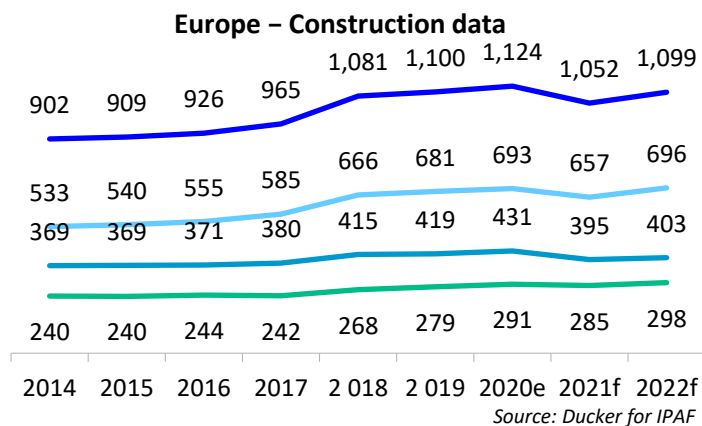
- Kiloutou says its business had demonstrated “extraordinary resilience” in the face of the pandemic, as it reported a 12.4% fall in 2020 revenues. Its business recovered in the second half of 2020, with revenues only 5.2% lower year-on-year. France was Kiloutou’s worst-hit territory in Europe, with a 15.6% drop across the year, while its businesses in Germany, Italy, Poland and Spain were described as having been more resilient.
- A common theme from rental companies across Europe has been a move to greater digitisation. Kiloutou is no exception, with the company accelerating its digital initiatives during the pandemic to include a new online offering for payment, management of rental contracts, quotes, reservations and off-hires. The company is also focusing on the environment and has a strategy to reduce direct CO2 emissions by 40% by 2030 and to achieve carbon neutrality by 2050.
- French construction giant Vinci also saw a strong increase in revenue in the first half of 2021. The upturn, it said, was particularly strong in France, where business levels were badly affected by the first lockdown that began in March last year. Of Vinci’s total revenue, 55% was generated in France. The company adds that business remained positive in public works and civil engineering, supported by major projects such as the Grand Paris Express along with other infrastructure projects.
- The concern for environmental issues and reduced emissions is at the forefront of many companies’ development plans. French MEWP and telehandler manufacturer Manitou announced all its aerial platform product launches from now on, including rough terrain units, will be 100% electric and primarily Lithium-ion-powered. Manitou has also set its sights on hydrogen, with the launch of a prototype hydrogen-powered telehandler set for 2022.



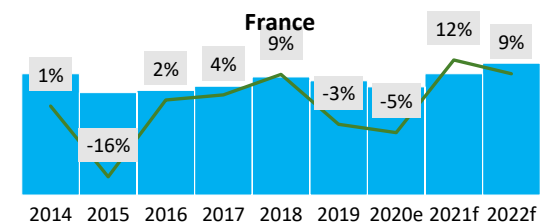
APPENDIX
IPAF Powered Access Rental Market
Report 2021 – *FRANCE*

France – Construction statistics

Both the construction sector and GDP as whole fell in France during 2020. A modest recovery in both is expected during 2021 and 2022.



Construction pipeline (billions euros) based on Euroconstruct 2021 figures.



FRANCE GDP per Capita YoY % evolution

Source: FrontierView – Sept 2021.

- Residential construction
- Non-residential construction
- Total construction
- Civil engineering / Major infrastructure

CAGR: Compound annual growth rate



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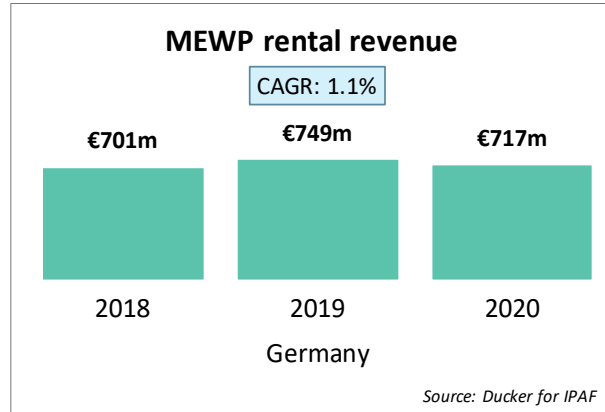
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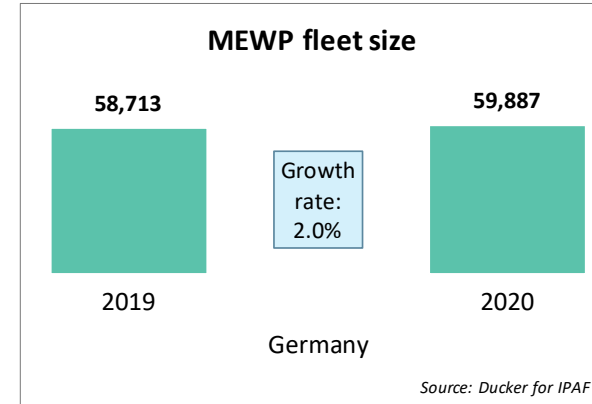
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Germany – key findings

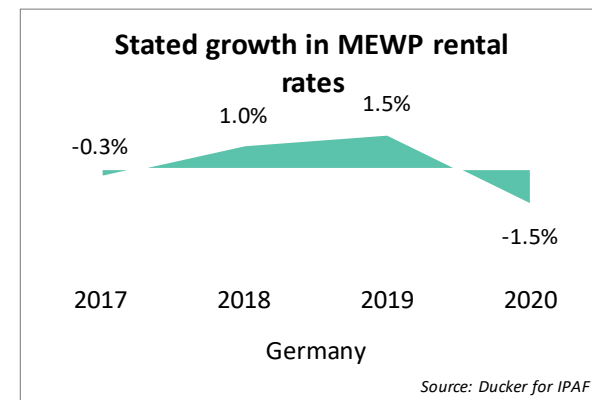
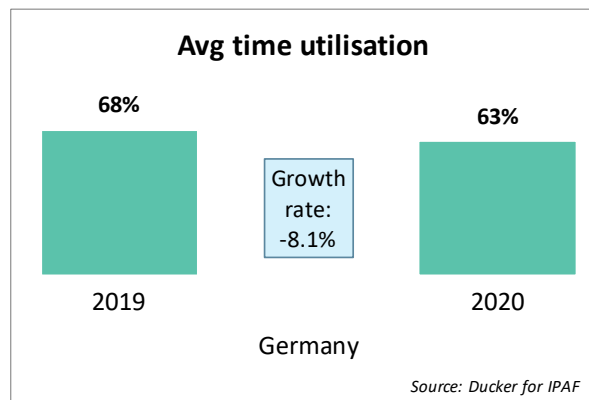
The German MEWP market revenue decreased by 4% in 2020 as a result of pandemic-related falls in fleet utilisation and rental rates. Utilisation and rental rates both fell across the year as a whole.



CAGR: Compound annual growth rate

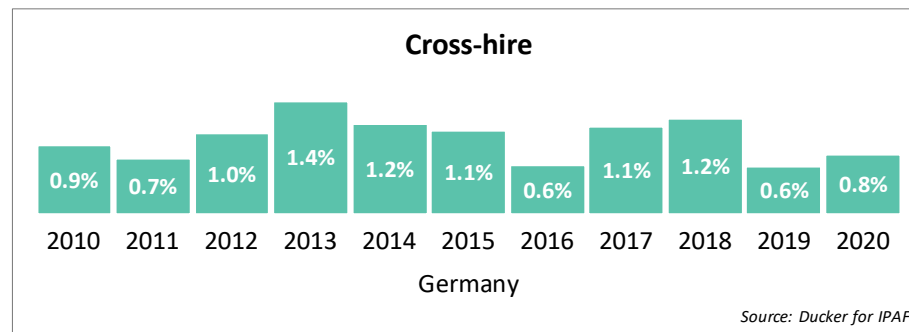
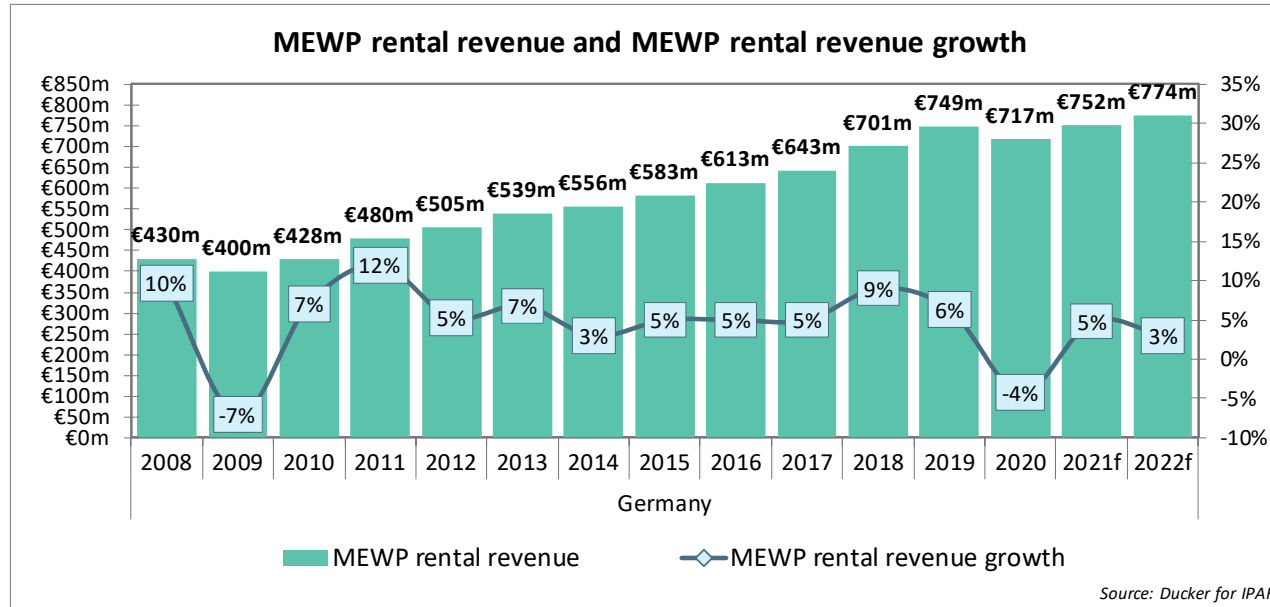


- As a result of the cancellation of most public events, as well as delays and downtime in construction, market revenue plunged by at least €30 million compared to 2019.
- Average utilisation time dropped by five percentage points to 63%, and rental rates fell by 1.5%.



Germany – rental market value and growth

The events of the pandemic forced the German rental market into decline for the first time in 11 years, but demand is quickly picking up across 2021, promising recovery of 3-5% growth over the next few years.

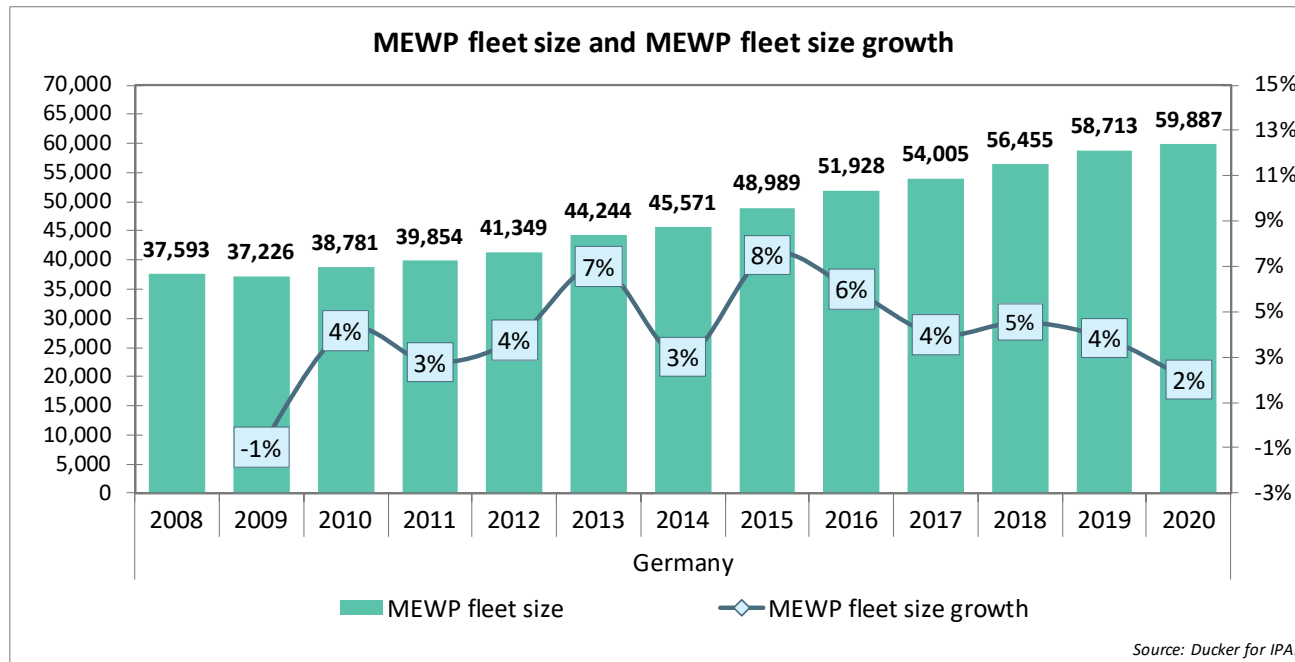


- The impact of the pandemic on the German market was inconsistent across different regions and applications, as restrictions were different across the country.
- The positive growth trend is expected to resume in 2021 and continue in 2022, supporting a relatively quick bounce-back.
- In 2020, the level of cross-hire slightly increased on 2019 to 0.8%.

Germany – market size in units

The German MEWP rental fleet increased by 2% in 2020, supported by especially strong demand in the second half of the year. The growth trend is predicted to continue at a modest rate through 2021-22.

- Despite the pandemic-induced obstacles to fleet growth, including revised investment policies, fleet size in Germany increased by almost a thousand units year-on-year, led by an especially positive second part of year.
- The total fleet size reached almost 60,000 MEWPs at the end of 2020.
- The country's fleet is expected to grow at a more moderate pace throughout 2021 and 2022.

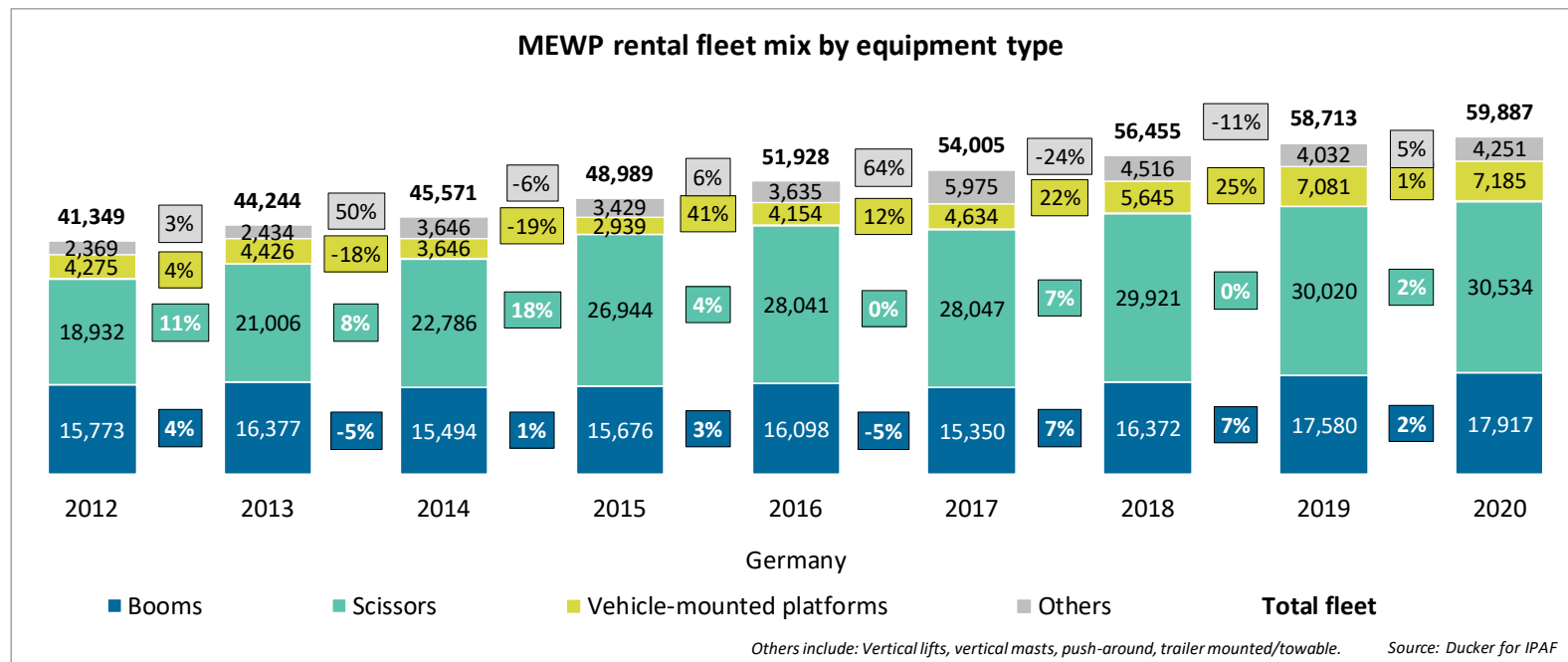


Included are powered access lifts: All booms, scissor lifts and vertical masts
Excluded: Low-level access equipment (<3m high), telescopic material handlers, forklifts, cranes, and MCWPs.

Germany – market size in units

The German fleet mix has remained relatively unchanged over the years. Scissors make up just over 50% of the German MEWP rental fleet, followed by boom-type platforms, both of which grew by 2% across 2020.

- The growth in fleet size was moderate across all MEWP types, with 2% increase in both main categories of scissors and booms. Other types of MEWP, including low-level access machines, increased in the fleet by around 5%.
- Scissors are in high demand across all applications, booms are typically used in the construction sector.



Included are powered access lifts: All booms, scissor lifts and vertical masts
Excluded: Low-level access equipment (<3m high), telescopic material handlers, forklifts, cranes, and MCWPs.

+X%

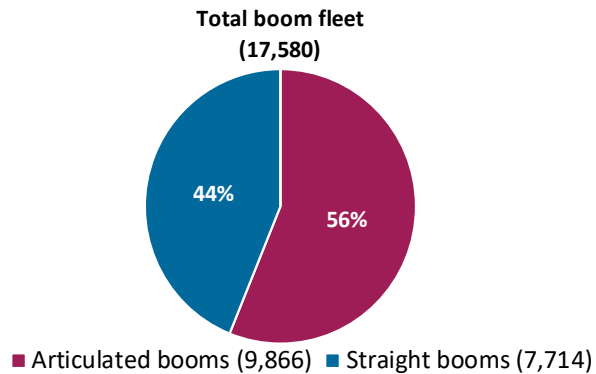
% unit growth, eg both scissors and booms fleet increased by 7% from 2017 to 2018.

Germany – market size in units

In 2020, the number of booms in Germany reached 17,900 units, with articulated booms accounting for 57% of the total boom fleet, a slight increase in percentage terms year-on-year.

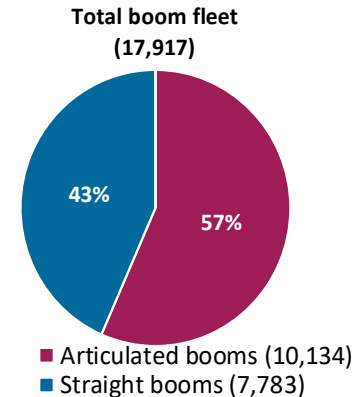
- The German boom fleet size increased by more than 300 units in 2020, with articulated booms continuing to account for just under 60% of the total boom fleet, mostly because of their versatility and performance over straight booms.

MEWP Boom Fleet Mix by Type – Germany – 2019



Source: Ducker for IPAF

MEWP Boom Fleet Mix by Type – Germany – 2020

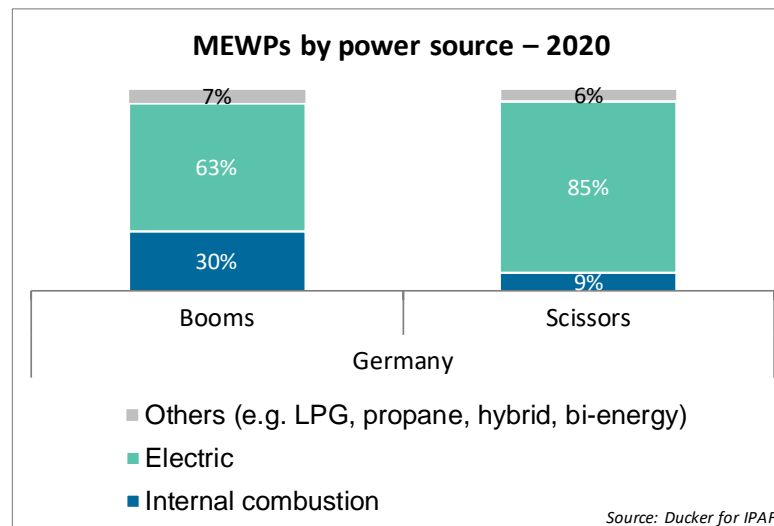


Source: Ducker for IPAF

Germany – power sources

By the end of 2020, 63% of booms and 85% of scissors in the German market were electric-powered, continuing to display a clear trend in fleet expansion and renewal towards cleaner, greener machines.

- When procuring new equipment for their fleets, German MEWP rental companies demonstrate a clear preference for either electric or hybrid power sources, depending on the availability and capability of the technology.
- Remaining internal-combustion-engined MEWPs are mostly larger outdoor scissors and boom lifts, typically used on construction sites with limited access to recharging or where electric-powered machines with equivalent performance don't yet exist.
- The share of internal-combustion engines in the total fleet continues to fall, decreasing by 3% in both categories over the past two years. This electrification trend is expected to continue in future years.



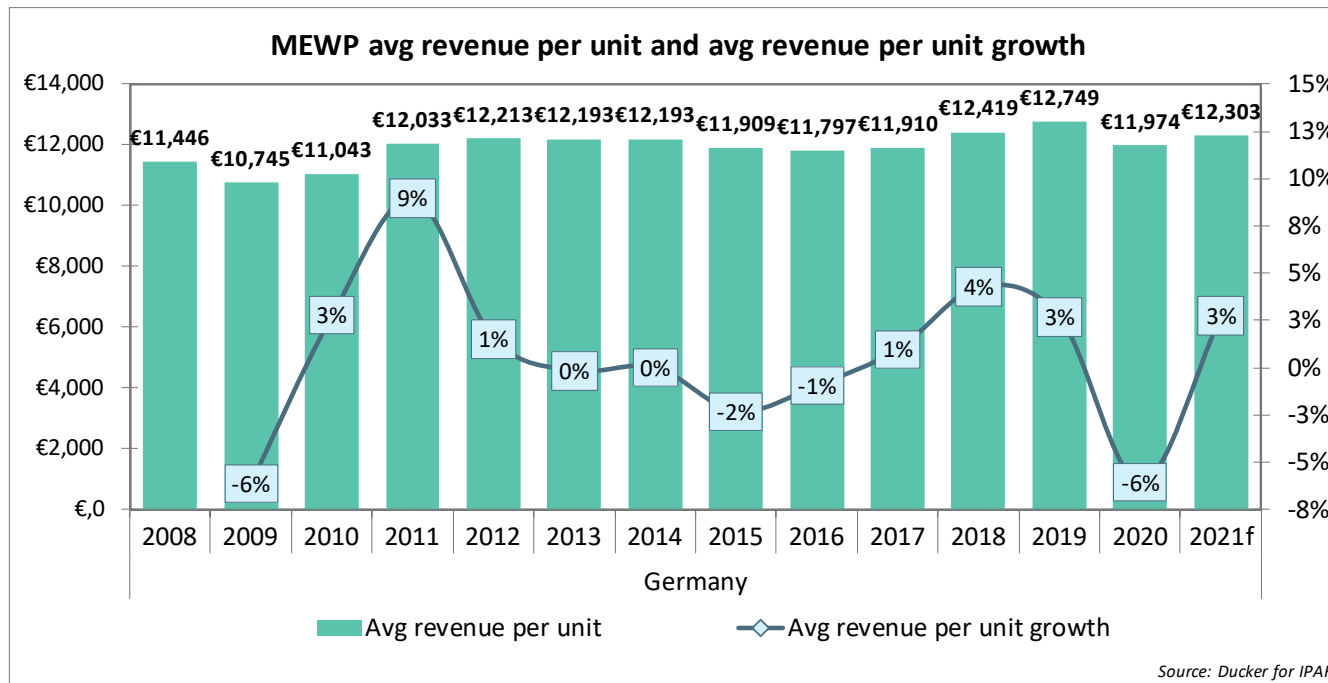
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“There are finally electric machines arriving to the market to replace diesel equipment. There is a lot of backlog demand on that and now we are catching up.” – MEWP rental company fleet manager

Germany – revenue per unit

Following a decline in fleet utilisation across 2020, average revenue per unit fell by 6% to below €12,000 per year, to a similar level to 2017. A recovery is underway, though not forecast to recovery completely in 2021.

- Average revenue fell to levels not seen since 2017 owing to pandemic-induced stoppages and falling rental rates.
- It is however expected to recover well during 2021, driven by significant utilisation improvements, and forecast to fall just short of the 2019 figure by year-end.

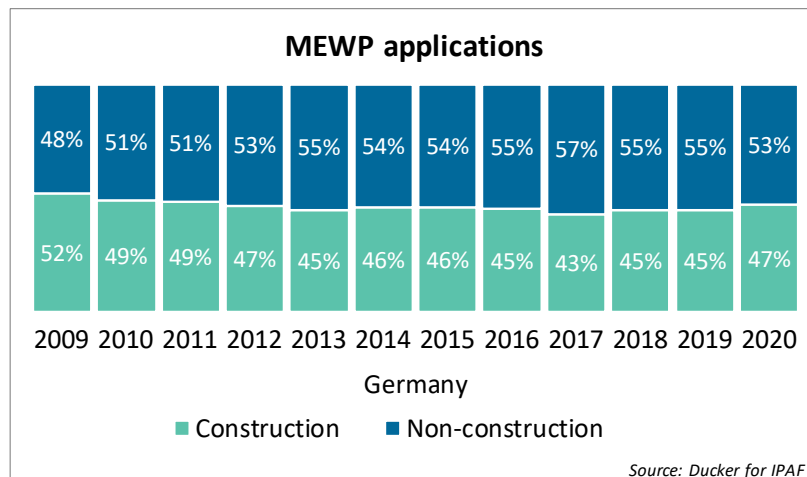


Included are powered access lifts: all booms, scissor lifts and vertical masts
Excluded: low-level access equipment (<3m high), telescopic material handlers, forklifts, cranes and MCWPs.

Germany – applications

Accounting for a 53% share of rental revenue, non-construction customers, including facilities management and logistics, remained the main end-user category for German MEWP rental companies despite the pandemic.

- Most operations in facilities management and storage were not significantly interrupted by the pandemic.
- However, as most media and event engagements were cancelled in 2020, the MEWP rental industry relied on construction more than usual during 2020.

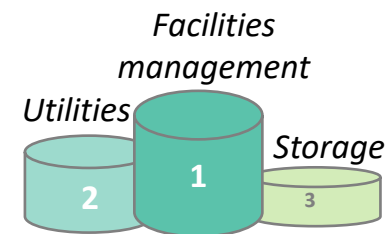


Share of rental revenue:

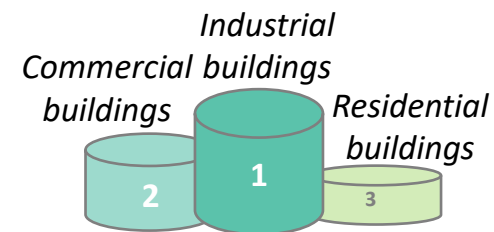
Non-construction includes industry, maintenance, cleaning, utilities, events.

Construction includes new-build and renovation; including residential, commercial, retail and industrial.

Main non-construction sub-sectors

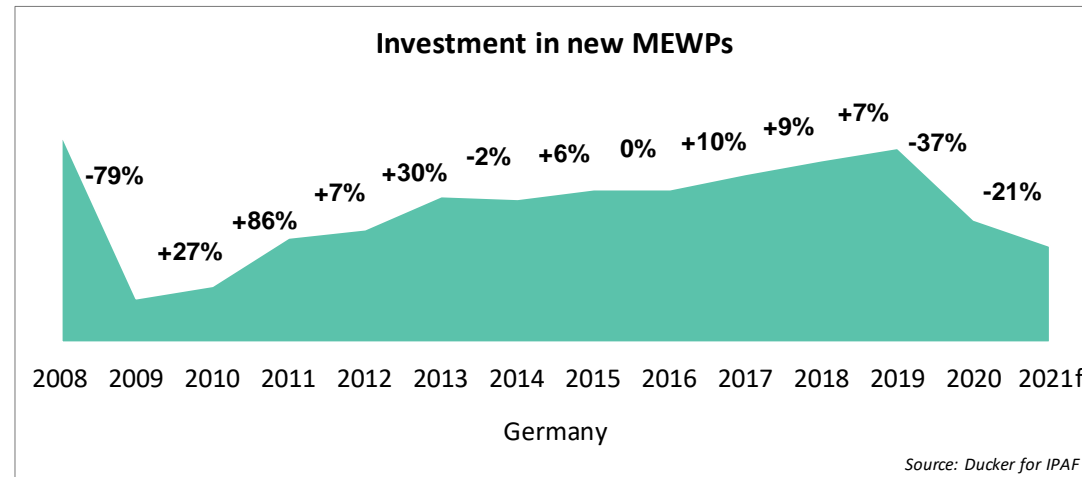


Main construction sub-sectors



Investment in equipment has fallen sharply in 2020 and is not expected to recover until at least 2022, as most rental companies placed a hold on new orders, focussing primarily on fleet renewal as opposed to expansion.

- Investment declined by 37% in 2020 as a result of two main factors:
 - Economic uncertainty led many companies to freeze orders of new machines between March and June 2020.
 - With price pressure increasing in the market, some larger companies responded by reducing their fleet size.
- Further investment decline is expected across 2021, and many rental companies will concentrate merely on renewal of equipment in a bid to increase utilisation rate.



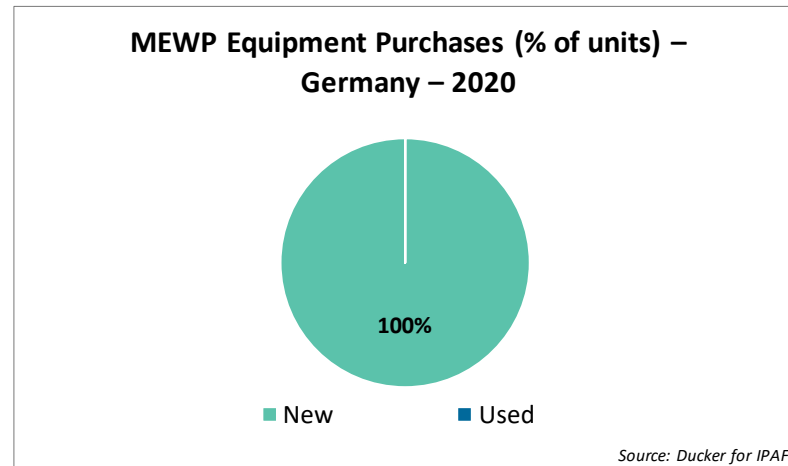
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“This year it is difficult, no-one knows yet how quickly the market will recover, and purchasing is difficult because many types of MEWPs are not available.” – MEWP rental company purchasing manager

Germany – equipment purchases

Used equipment is bought by German MEWP rental companies only in exceptional cases, for instance to obtain a specialist MEWP quickly that is not readily available direct from the manufacturer.

- The general practice in the German market is to buy new equipment only, as it offers better capability, safety technology and is expected to retain a higher resale value.
- In the light of tightening CO₂ emission regulations in the EU, used machines are becoming especially unattractive, because they are typically equipped with either diesel or older electric power sources. Most older machines if not all are typically sold to the export market, heading to the Middle East or emerging economies overseas.



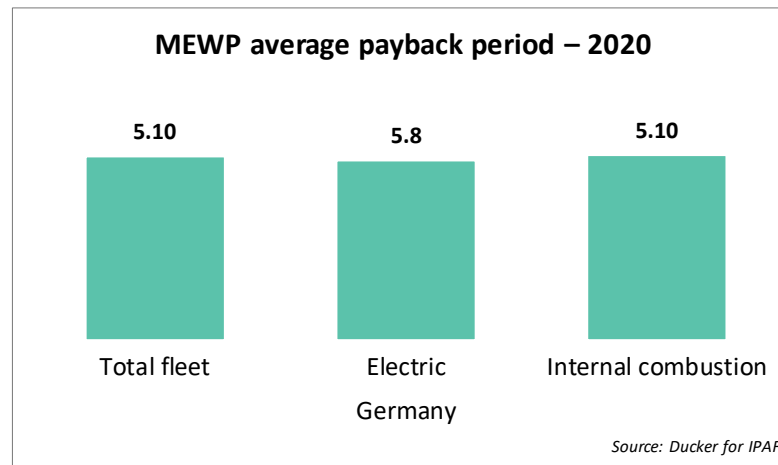
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“We don’t buy used, unless it’s a specialist machine that we need quickly and can only get a used one.”
– MEWP rental company manager

Germany – typical payback period

The average payback period in Germany continues to increase. Internal combustion-powered machines' payback period remains slightly longer than for electric machines.

- The typical payback period is now five years and ten months on average, a 15 month-increase on the typical payback period reported for 2019.
- The payback period is increasing in parallel to the size of equipment: Larger MEWPs are typically diesel-powered and have longer payback periods because of higher acquisition cost and lower utilisation rates.



5.10 = 5 years and 10 months

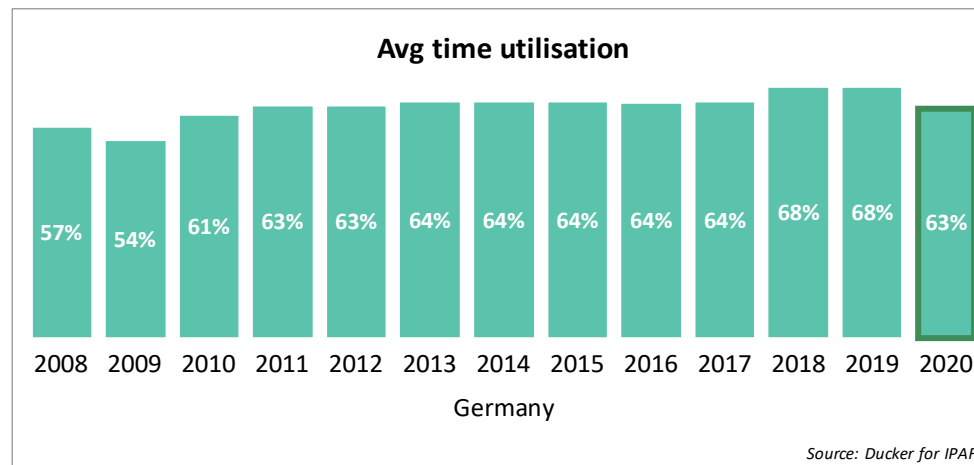
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“Electric MEWPs are more profitable, but they are also smaller machines and may be more profitable because of their size.” – MEWP rental company investment strategist

Germany – utilisation rates

In line with robust post-pandemic economic recovery, Germany's rental companies are experiencing a significant improvement in average utilisation rates as demand rebounds strongly, outstripping rental supply.

- Utilisation rates fell to 63% in 2020, mostly as a result of a sharp decline in the first half of the year that affected scissors fleets especially. The second half of the year improved, limiting the damage to a 5% loss.
- Since the second half of 2020 and throughout 2021 utilisation rates increased; there is an increasing consensus that there aren't enough MEWPs in the rental market to satisfy demand, which should continue to fuel this increase.



Scissors: 63%

Booms:
63%

Definition: Physical number of machines out on hire as % of total number in fleet at any given time.

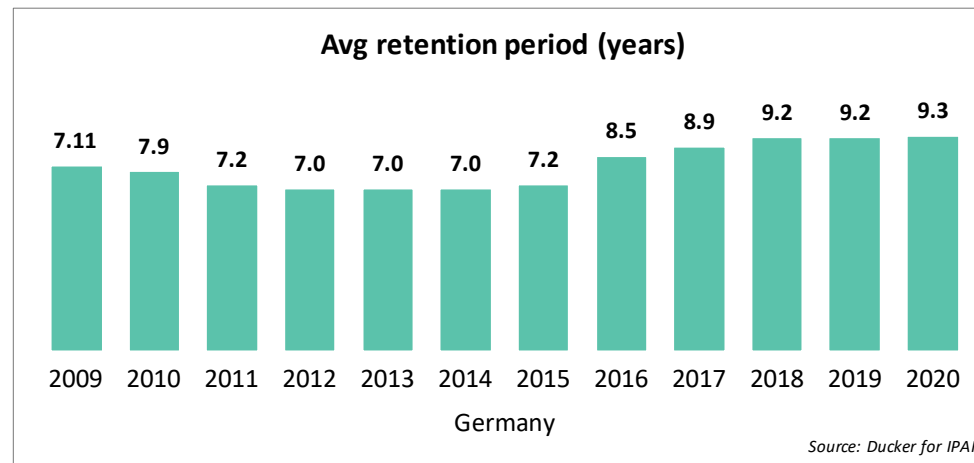
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“Apart from during the first wave of Covid-19, utilisation rates were even higher than usual. We are buying new units and still they all are constantly out working.” – MEWP rental company hire manager

Germany – retention period

The average retention period of MEWP equipment in the German rental fleet now stands at around nine years and three months, and this is expected to further increase over the next few years.

- Average retention period has been continuously increasing during the past decade in Germany, because of increased demand, higher acquisition costs but also greater reliability and longevity of new MEWP equipment.
- In addition to the technological advancement benefits, companies currently find themselves forced to keep machines in service for longer due to increased lead times on new equipment and associated supply chain issues.



9.3 = 9 years and 3 months

Definition: Period of time that a machine is kept in fleet = selling age if acquired new

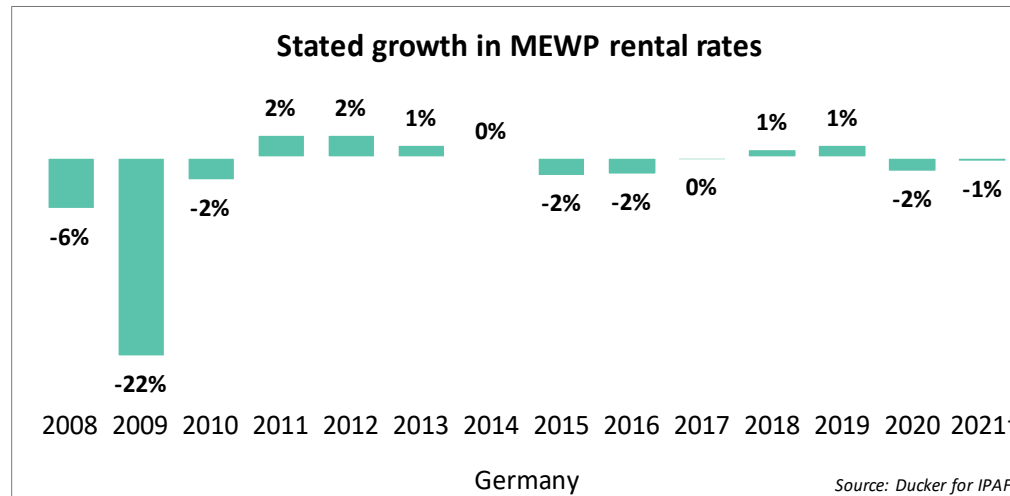
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“Usually, we sell the older machines quickly if we can, but this year they were used as backups, and rented out quite a lot.” – MEWP rental company fleet manager

Germany – rental rates

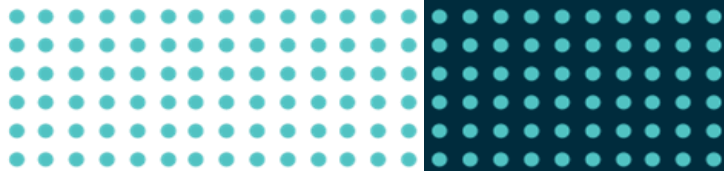
As demand plunged during the end of Q1 2020, rental rates were suppressed and dropped by 1.5% on average across the year as a whole. Demand is currently outstripping supply, which could spark a recovery.

- A negative price trend was experienced in the German market for the first time since 2016, and it is expected to continue in 2021, though demand outstripping supply as it is currently could see a return to positive territory.
- A key factor of has been strong market competition, with companies trying to win new business and recover lost revenue by pushing rates down to improve utilisation rates and compensate for losses sustained during 2020.



“

“Many projects in the industry were on hold and it was harder to generate revenues, so the prices went down [...] though I think that the market is healthy and doesn’t need price adjustments.” – Rental company manager



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Report 2021 – *GERMANY*

- There is more of a mixed picture in Germany than in other European markets. While stability was the overriding experience of the general rental and construction market during 2020, the MEWP rental sector has been less buoyant. The latest report from the European Rental Association (ERA) shows that general rental in Germany fell by a modest 1.5% last year and is expected to grow 4% in 2021.
- According to BBI, the German association for sales and rental of construction equipment, distributors and rental companies experienced an uneven 2020, following a decade of sustained growth. The rental segment remained strong throughout the year, it said, and the rental of construction machinery saw an increase of 2%.
- But the association also said its survey of MEWP rental companies revealed a decline in sales of 7.5%, owing mainly to a drop in demand from the event and trade fair sectors, which were heavily impacted by Covid restrictions. Though strains on access rental continue, BBI forecasts general rental will see a 5% rise this year.
- Zeppelin Rental, Germany's largest rental company, supports BBI's findings. The company says the effects of the pandemic were most strongly felt in Germany from April to June 2020. Markets then saw a resurgence in the country, with business reaching an unprecedented peak in the third quarter.

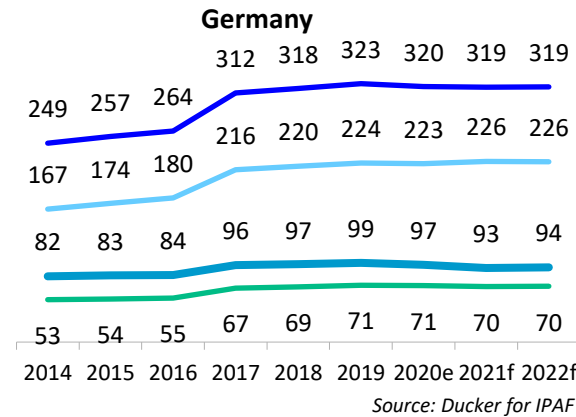
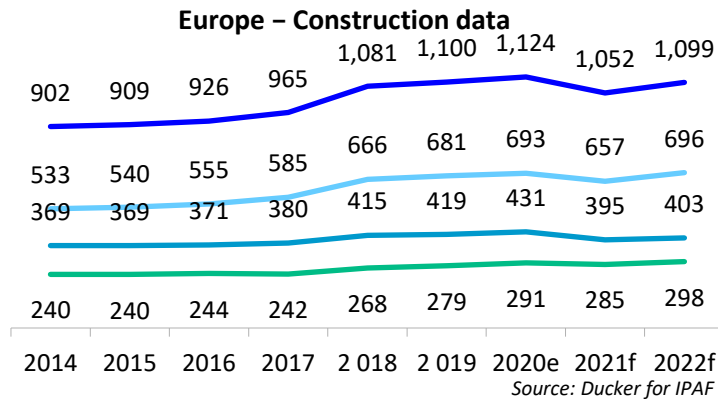
- Most adversely affected was the aerial platform segment. At one point there was no work in some sectors, such as events, hospitality and industrial work, which had an impact on the MEWP fleet, leading to a 5% drop in utilisation overall to stand at just below 60%.
- Utilisation across the company's general rental fleet is now higher than it was in 2019. The company said it helped that MEWPs only form 5% of its total rental fleet. On the plus side, the company said, the entire MEWP sector should return to 2019 levels sometime in 2022.
- The relative strength of the construction market in Germany during 2020 meant average increases across Europe have not been as high. According to the Committee for European Construction Equipment (CECE), equipment sales grew in Europe by 11% in the first quarter of 2021, over the same period in 2020. This, it says, does not reflect market volatility in 2020: "Growth rates were moderate mainly because the two largest markets of Germany and France, which account for almost 40% of total European demand, saw flat sales."
- In a sign that the market is returning to some normality, Germany's Platformers' Days – one of the world's very few powered-access-specific trade exhibitions, was held in September 2021, following the postponement from its original date in September 2020. The show featured around 100 exhibitors and attracted more than 2,000 visitors. In recognition of how quickly "green" equipment is being seen as vital part of immediate and future European rental fleets, show organisers added new electric and rough-terrain demonstration zones to this year's event.



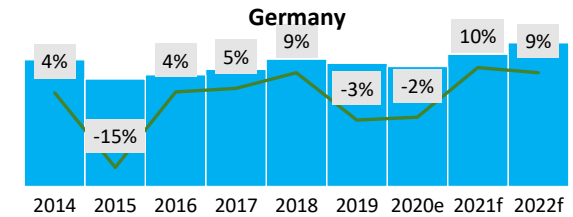
APPENDIX
IPAF Powered Access Rental Market
Report 2021 – *GERMANY*

Germany – Construction statistics

Germany experienced relative stability in both construction and its overall economy, despite the pandemic. It remains to be seen whether growth is set to return, or political uncertainty will suppress an economic rebound.



Construction pipeline (billions euros) based on Euroconstruct 2021 figures.



Germany GDP per Capita YoY % evolution
Source: FrontierView – Sept 2021.

- Residential construction
- Non-residential construction
- Total construction
- Civil engineering / Major infrastructure

CAGR: Compound annual growth rate



RESEARCH & CONSULTING

October 2021

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COUNTRY REPORT – Italy

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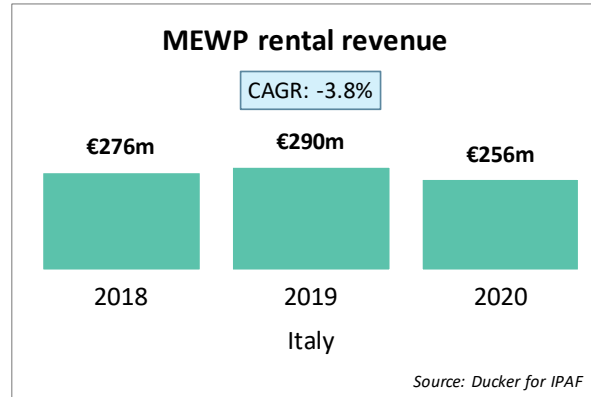


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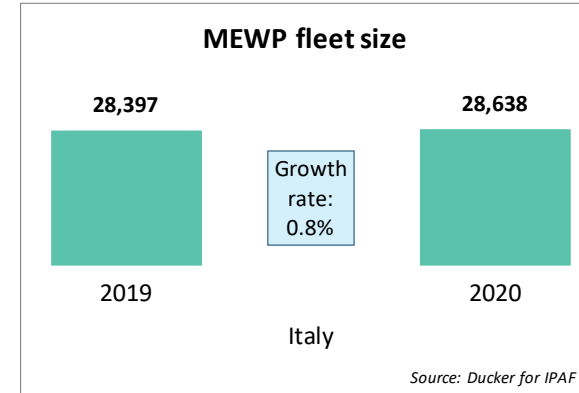
IPAF has been working with Ducker to create these exclusive industry reports since 2009

Italy – key findings

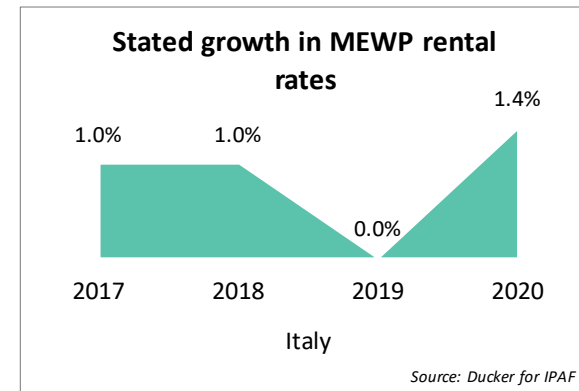
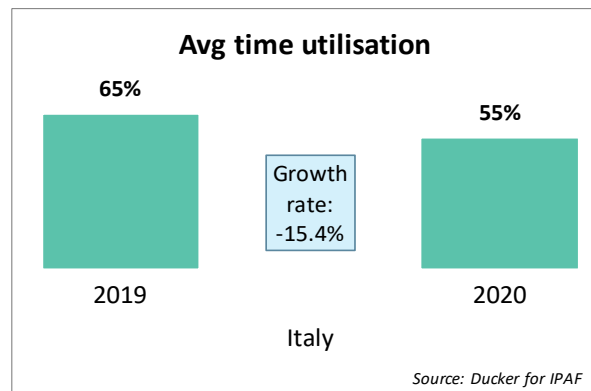
The Italian MEWP rental market was one of the most severely hit by the Covid pandemic, with a 12% decline during 2020 as a whole. The leading players in the market are however bullish about the chances of a robust recovery.



CAGR: Compound annual growth rate

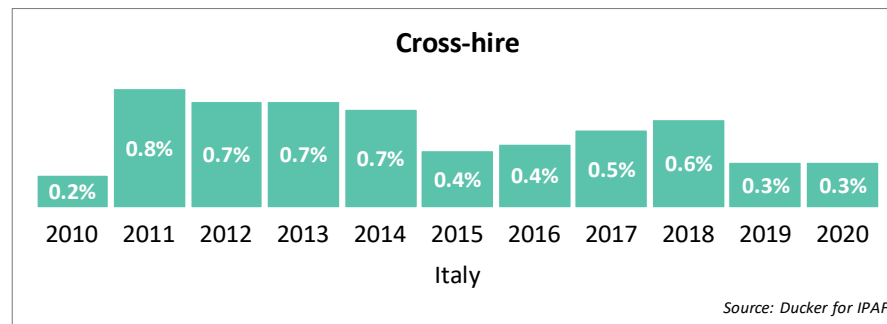
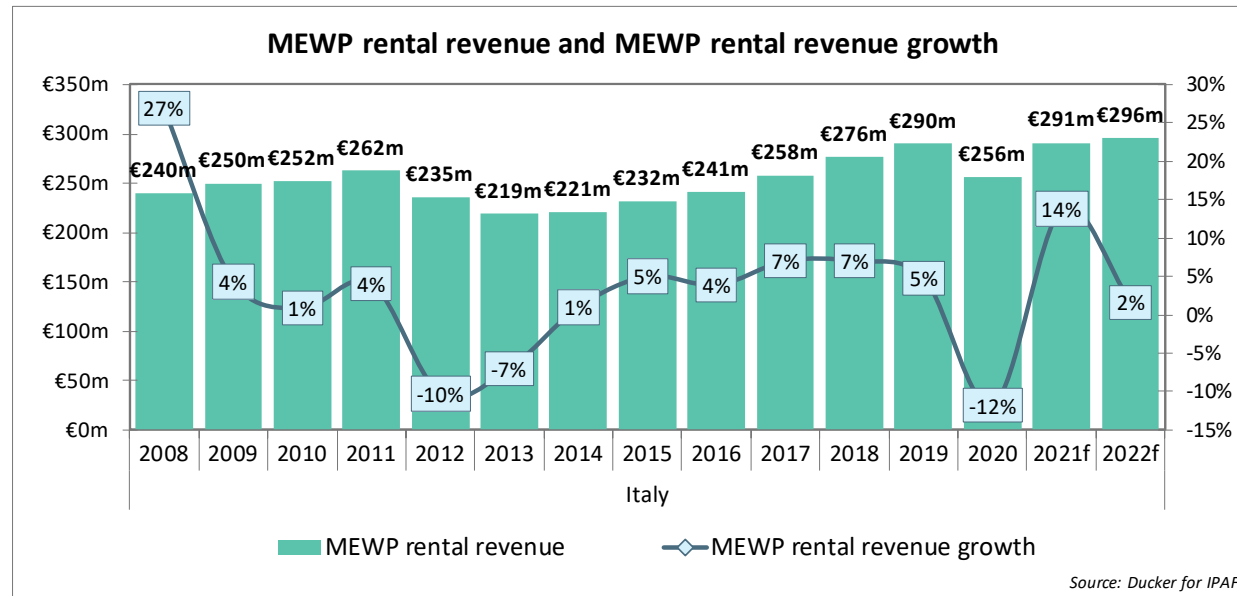


- Rental revenue dropped by 12% in 2020, mainly due to the significant fall in utilisation rate.
- Despite the drop in revenue, companies kept their fleet size and rental rates stable, in anticipation of a relatively robust and rapid recovery in 2021.



Italy – rental market value and growth

Total rental market value dropped by 12 percentage points in 2020 because of the relatively lengthy four-month lockdown imposed in the country at the height of the pandemic.

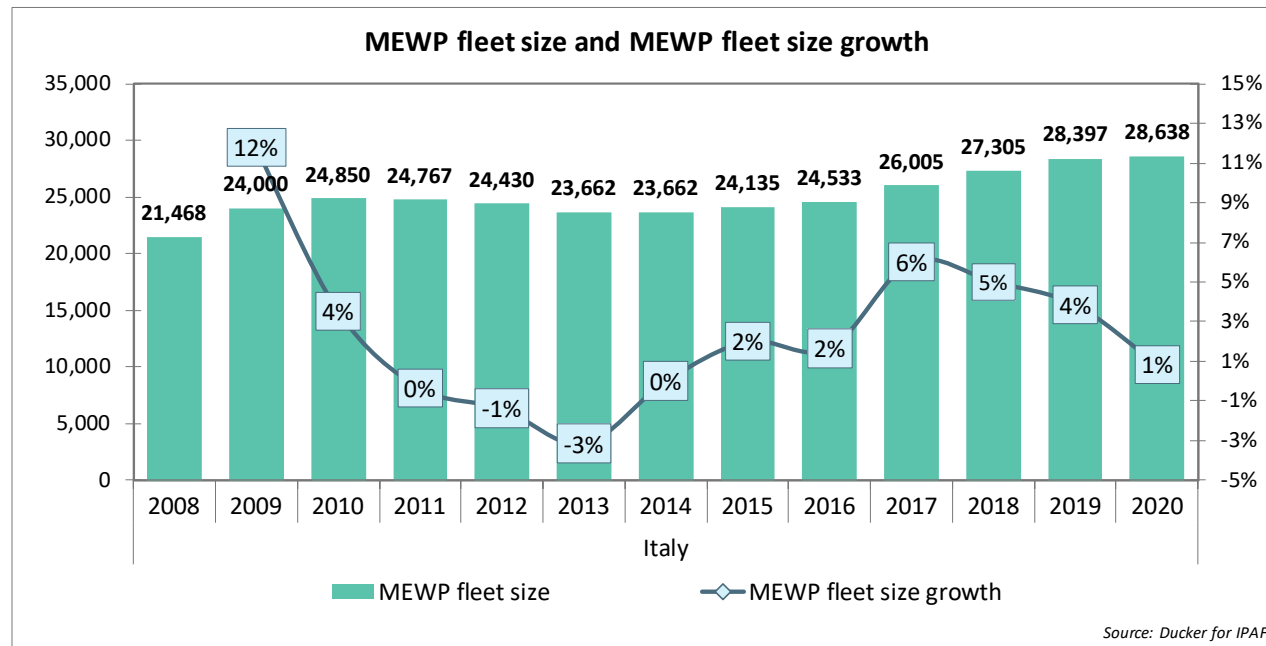


- Due to the strict four-month lockdown in Italy, rental revenue shrank drastically in 2020.
- In 2021, revenue is expected to be higher than in 2019, with many projects launched in construction adding to the catch-up in pipeline for delayed projects.
- In 2020, cross-hire stayed stable compared to 2019.

Italy – market size in units

The overall Italian fleet size actually grew by around 1% in 2020, despite the Covid crisis. This makes it a relative outlier in Europe, as most if not all of the other countries under study saw fleet sizes remain static or even shrink.

- Anticipating long-term growth, rental companies pushed ahead on investment in new machines during 2020.
- Fleet size will keep increasing in 2021 and 2022, especially for companies who reduced their investment in 2020.

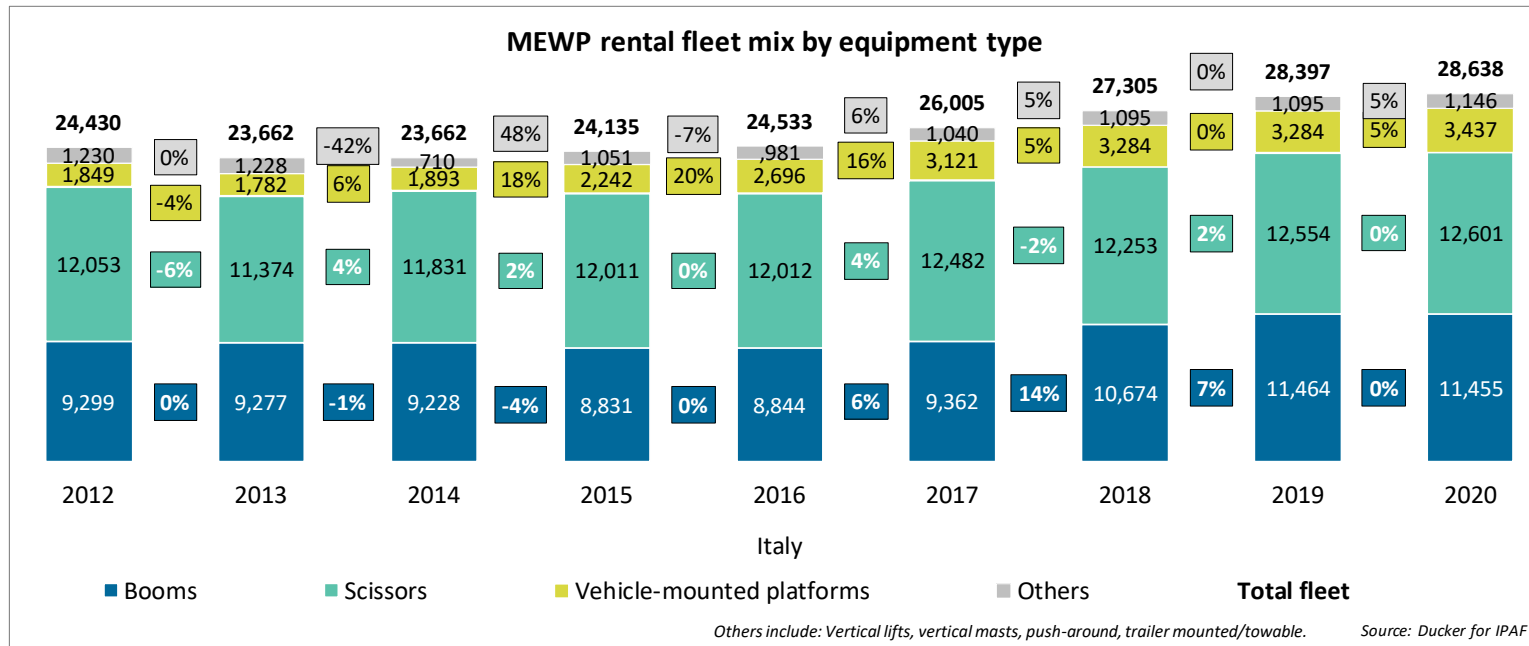


Included are powered access lifts: All booms, scissor lifts and vertical masts
Excluded: Low-level access equipment (<3m high), telescopic material handlers, forklifts, cranes, and MCWPs.

Italy – market size in units

Overall fleet mix remained unchanged in 2020, with the share of fleet remaining the same split between scissors and booms as it did in 2019. Vehicle-mounted machines and other specialist machines saw a 5% year-on-year rise.

- With the fleet size increasing by 1%, it can be seen in the chart below that this growth was mainly driven by truck-mounts and vertical masts and other types, which both grew fleet share by 5% over booms and scissors (0%).



Included are powered access lifts: All booms, scissor lifts and vertical masts
Excluded: Low-level access equipment (<3m high), telescopic material handlers, forklifts, cranes, and MCWPs.

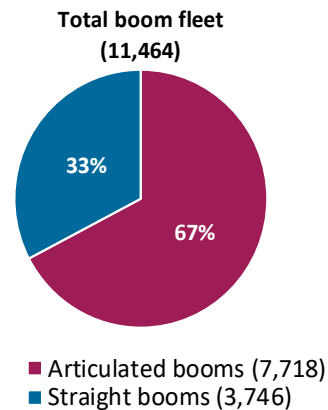
+X% % unit growth, eg both scissors and booms fleet increased by 7% from 2017 to 2018.

Italy – market size in units

Articulated booms gained around 3% in terms of the total boom fleet share across 2020, a not-insignificant shift. In 2019, articulated booms accounted for a third of the total boom fleet, and this was down to just 30% at end 2020.

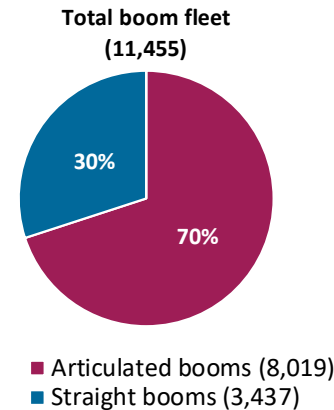
- There is a clear preference for articulated booms over straight booms, with this rising by 3% between 2019 and 2020.
- Various major infrastructure projects on bridges and highways have no doubt accelerated this trend, as articulated booms are more versatile for conducting this type of complex access work.

MEWP Boom Fleet Mix by Type – Italy – 2019



Source: Ducker for IPAF

MEWP Boom Fleet Mix by Type – Italy – 2020

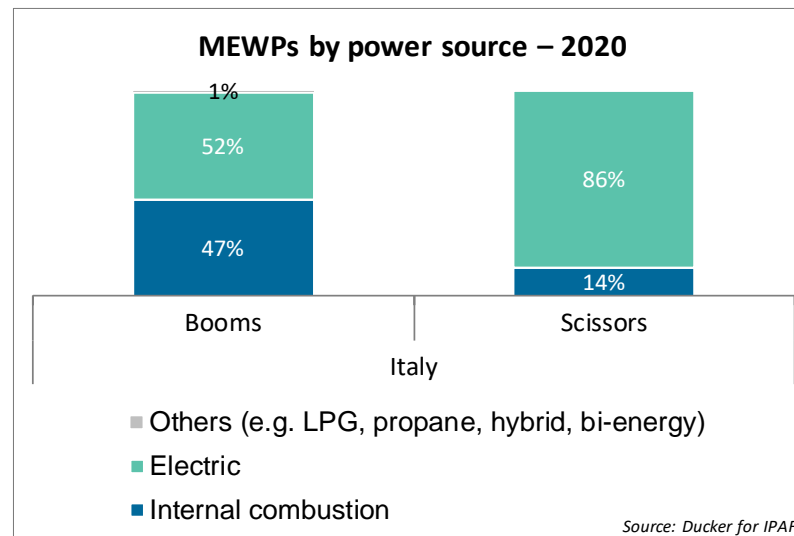


Source: Ducker for IPAF

Italy – power sources

Electric equipment accounts for around 52% of booms and 86% of scissors in 2020 in the Italian fleet. It is significant that more than half of the total fleet is electrically powered, and this trend is set to continue.

- The trend towards electrification continued in 2020, with increasing demand from customers to reduce the environmental impact of their sites.
- The vast majority of scissors are used for inside applications therefore being electric is usually a principal requirement, but some of the larger, rough-terrain scissors for outdoor use still utilise internal combustion.
- Hybrid equipment is an opportunity for rental companies to add more flexible machines able to work both inside and out but many rental companies, perhaps deterred by relative costs, prefer all-electric or diesel machines.



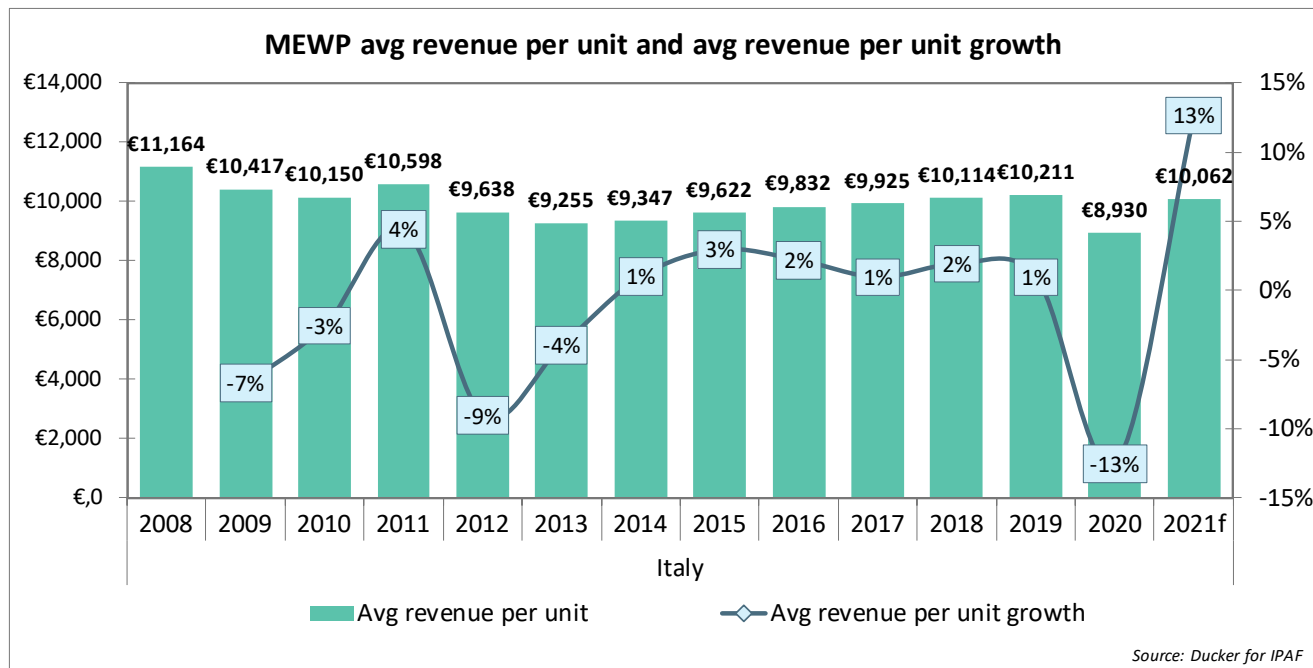
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“Hybrids can work both inside and out, but manufacturers are trying to evolve the technology so it can work more outside. We are looking at it but haven’t made a major shift yet.” – MEWP rental company manager

Italy – revenue per unit

Average revenue per unit shrank by 13% in 2020, but that is expected to quickly recover in 2021 and beyond as part of an anticipated robust and sustained recovery across all key indicators.

- In 2020 with a strict four-month lockdown, the utilisation rate dropped dramatically, which impacted revenue per unit commensurately. Combined with a 1% fleet size increase, revenue per unit decreased to €8,930 per year.
- With a quick recovery expected from Covid and the lockdowns of 2020, the average revenue per unit should reach 2019 levels during 2021 and continue this growth trend in 2022.

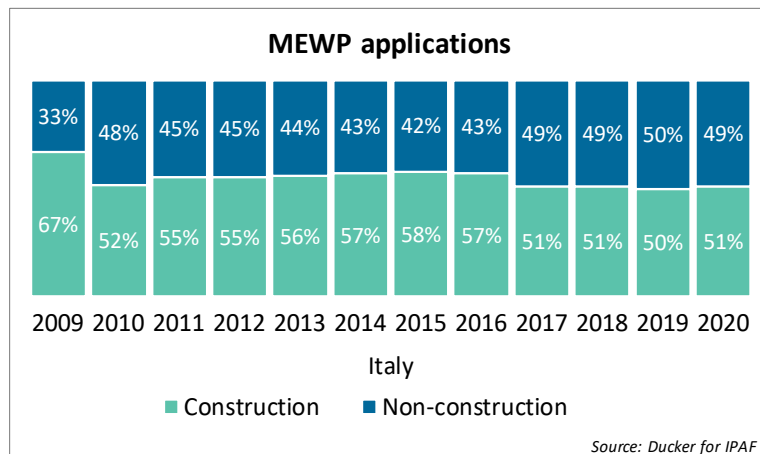


Included are powered access lifts: all booms, scissor lifts and vertical masts
Excluded: low-level access equipment (<3m high), telescopic material handlers, forklifts, cranes and MCWPs.

Italy – applications

Construction gained a 1% share of total end-use applications in 2020, to stand at just over 51% of the total end-applications for Italian MEWP rental fleets. Much of this has been driven by investment in public works projects.

- Construction has been driven by public investment in bridges and highway flyovers and tunnels, aiming to improve the safety of infrastructure around the country, especially following the collapse of the high road flyover in Genoa in February 2019 that revealed chronic underinvestment over many years.
- Both construction and non-construction sectors recovered equally quickly after the first lockdown in 2020, and were less impacted by the national and regional lockdowns imposed during early 2021.

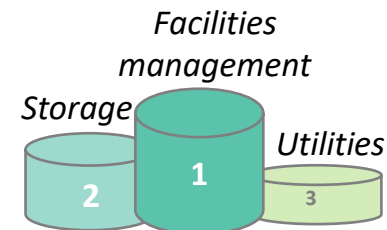


Share of rental revenue:

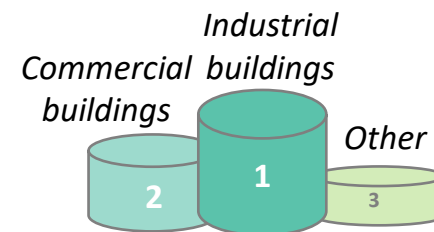
Non-construction includes industry, maintenance, cleaning, utilities, events.
Construction includes new-build and renovation; including residential, commercial, retail and industrial.



Main non-construction sub-sectors



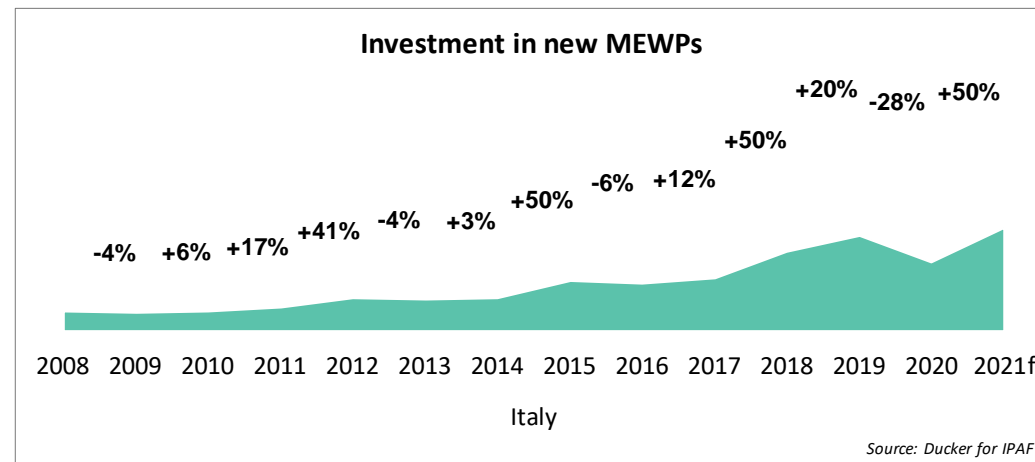
Main construction sub-sectors



Italy – investment

Rental companies reduced their investment by an average of 28% in 2020 compared to 2019. Despite this fleet size did grow by around 1% and most companies surveyed expected to increase investment in 2021 and beyond.

- The continuous investment growth of the past five years has been reversed by the pandemic, with a 28% fall in 2020, leading to rental companies being more cautious than usual, and slowing down fleet expansion.
- However with the pandemic largely behind us investment is expected to grow exponentially in 2021, with new machine sales hitting an all-time high for some manufacturers. It remains to be seen how supply chain issues may affect the ability of manufacturers worldwide to fulfil burgeoning demand, as the post-pandemic boom takes hold.



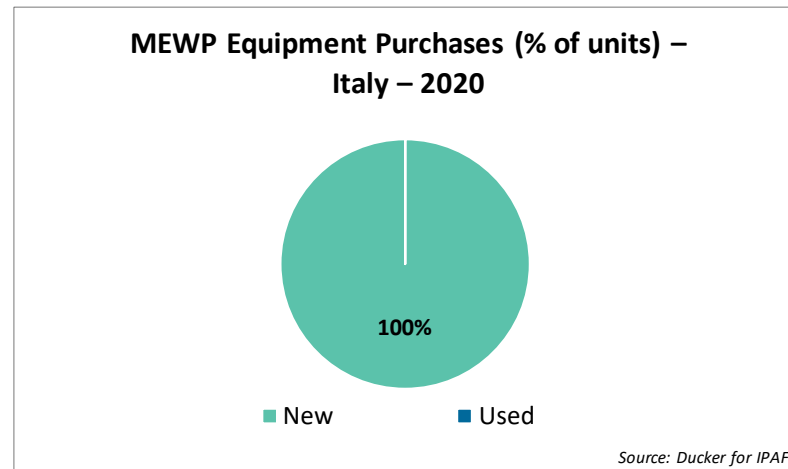
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“In 2020 we had to halt a lot of investment, so in 2021 we recuperated 2020 investment and added more on top of that” – MEWP rental company investment strategist

Italy – equipment purchases

Rental companies prefer to buy new machines, with almost no used machines added to Italian fleets in 2020. It remains to be seen if a global slowdown in availability and increased lead times on new machines will impact this.

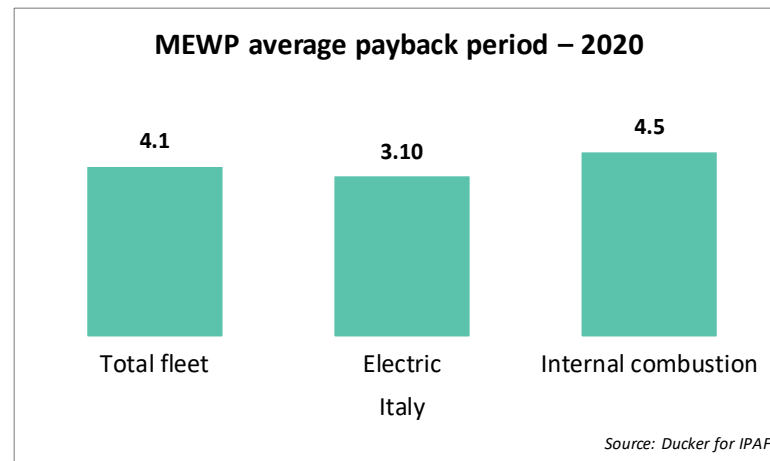
- With a growing market and increasing safety regulations, rental companies continue to prefer pretty much exclusively to buy new machines rather than purchase used equipment.
- With increased demand for specialist equipment and a possible brake on the availability of new machines, or at least increased lead times on delivery, it will be interesting to note whether this changes in 2021 and beyond.



Italy – typical payback period

The average payback period in 2020 was around four years, broadly similar to that of previous years. Will reduced utilisation rates in 2020 and possible availability issues and price increases on new machines affect this in future?

- The average payback period remained stable year on year, with a faster payback period for electric MEWPs than for diesel-powered machines.

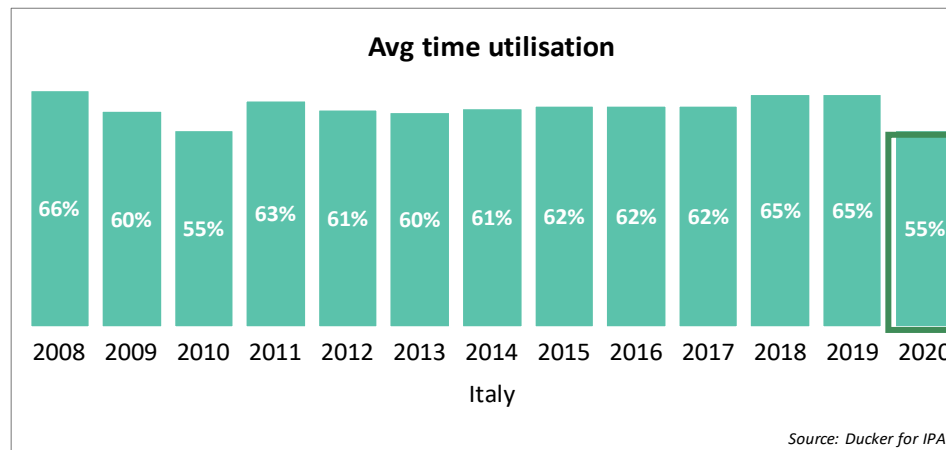


4.5= 4 years and 6 months

Italy – utilisation rates

Utilisation rate dropped by 10% in 2020, a significant fall caused by the very strict national lockdown that saw all but the most essential construction, maintenance and utilities activity halted. It rebounded very quickly.

- In 2020, all but essential activity stopped during the strict four-month lockdown in Italy, impacting the average utilisation rate significantly.
- After lockdown, utilisation rates went back to pre-pandemic levels of around 65%.
- In 2021, utilisation rate is expected to keep increasing above 65%, owing to high demand in the construction sector.



Scissors:
54%

Booms:
56%

Definition: Physical number of machines out on hire as % of total number in fleet at any given time.

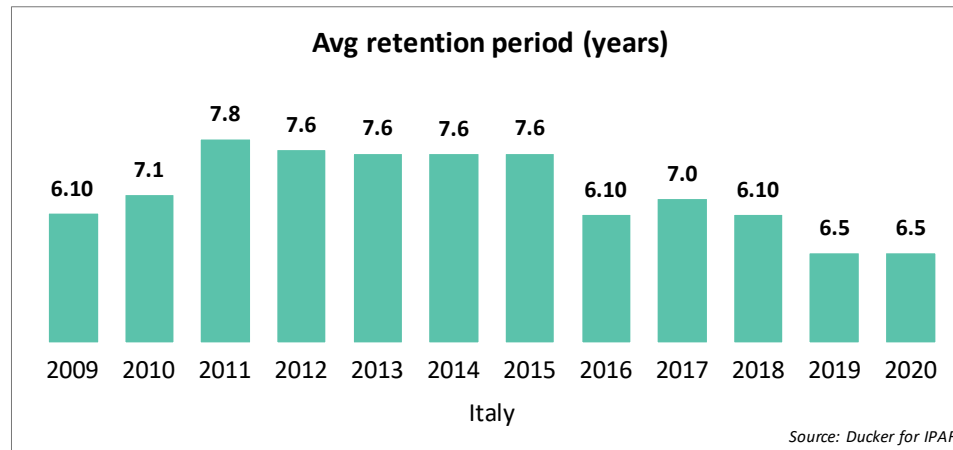
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“2021 has had a positive start and we are expecting to close on budget. The lockdowns that took place in 2021 had no significant negative impact on our business” – MEWP rental company manager.

Italy – retention period

Average retention period remained fairly stable in 2020, at around six and a half years on average per MEWP. This may be extended slightly in years ahead if continuing demand drives fleet expansion and lead times on MEWPs peak.

- Despite the pandemic, rental companies decided not to defleet and stuck to their equipment renewal policies, anticipating a quick recovery once lockdowns were eased and the disruption from Covid-19 receded.
- Electric scissors tend to be kept longer in the fleet than booms, as the maintenance costs are lower for this type of equipment on average and the type and nature of typical end-uses mean they tend not to wear out so quickly.



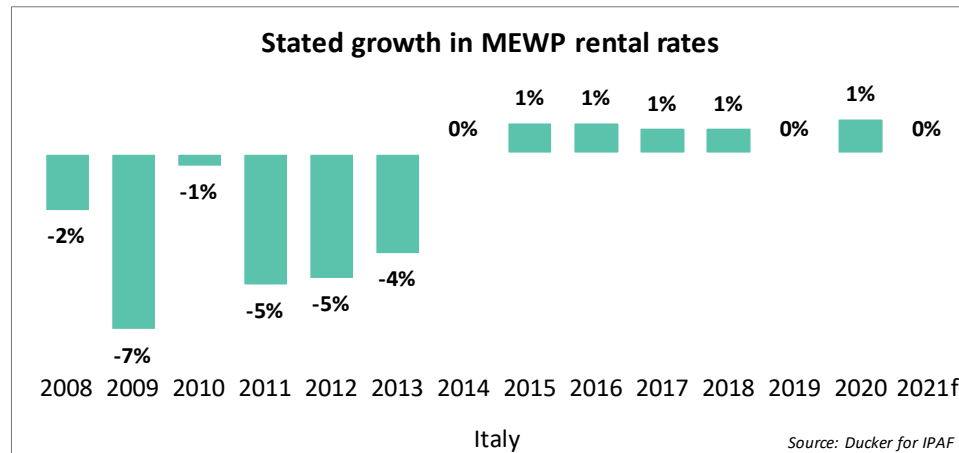
6.5 = 6 years and 6 months

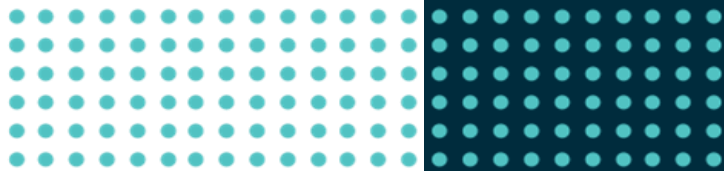
Definition: Period of time that a machine is kept in fleet = selling age if acquired new

Italy – rental rates

Despite all the disruption, Italian rental companies saw average rates increase by 1% across 2020 as whole, a sign of the booming market in 2019 and early 2020, and the rapid rebound once the March-July lockdown was over.

- The pandemic had no lasting impact on rental rates, which continued to increase across 2020 as whole, to stand 1% up on 2019 at the end of the year. Electrification of the fleet is one of the main reasons for this rental rate increase.
- With increasing competition between rental companies, prices are expected to stabilise in 2021.





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- As one of the markets to be hardest hit by the pandemic, Italy saw one of the larger falls for 2020 in the European Rental Association's (ERA) Market Report update, published earlier this year. The report presented a gloomy assessment for southern European countries and the UK last year, and a better-than-expected situation for countries in central and northern Europe.
- However, according to the ERA, Italy, along with its southern European neighbours, and the UK, has seen greater growth in 2021 than other European countries. The association believes Italy's rental activity will grow by 6.5% this year, compared to 2020.
- The perception of Italian manufacturers of access equipment, of which there are many, is that the country's rental sector is now stronger than it has been for years. Italy is a hub for truck-mount and spider lift production, with those equipment types, in many cases, remaining in demand throughout the pandemic for essential services.
- According to Italian MEWP manufacturer Imer, the rental sector is booming and has been operating at a high level since June last year, following the initial panic when the pandemic first struck early in 2020. This led to a 40% drop in business for the company over the first half of 2020, however, the bounce-back in the second half was strong, helped by government incentives to stimulate the economy and low borrowing rates.
- Italy's rental resurgence should be viewed in the context of the country's long-term economic challenges, stretching back to the last financial crisis, which began in 2008. It means growth has started from a lower base; nevertheless, it is clear confidence has returned, and Imer expects growth of more than 20% in 2021.

- Another example of renewed confidence in Italy came in April, when a newly launched private equity firm QCapital announced it would invest €15 million in Italy's largest MEWP rental company Venpa, for a 42.5% shareholding. The transaction provides funds for "substantial" growth through additions to its fleet and acquisitions.
- Venpa says the focus for the business will remain in Italy, thanks to a high level of potential in the country, but adds that international markets are also of interest. As the company points out, the new deal: "Will allow us to seize the countless opportunities for growth in our increasingly dynamic and rapidly expanding [Spanish] market."
- Fellow Italian rental company Mollo Noleggio, which rents equipment across the construction industry, has also made solid progress, despite Covid-19. The company reported a turnover of €80 million for 2020, a 10.7% increase on 2019. A clear opportunity being exploited by rental companies across the world is digitisation to enhance efficiency of operations, and Mollo Noleggio puts much of its success down to embracing this. The company has developed ERP software and a web portal to share real-time information through location of fleet, machine operation, and maintenance planning.
- The opportunities in Italy are not lost on companies working outside the rental industry, either. For example, start-up company Italtel's vision to construct one of Europe's largest gigafactories, the first in Italy, is a step closer following the purchase of 1 million square meters of land in Piedmont, in north-west Italy. Once operational, it will produce batteries providing 45 gigawatt hours per year.
- In conclusion, spirits are high in Italy at present, with Loxam confirming the trend in its most recent results, stating that the country had evidently rebounded well from the depths of the pandemic.

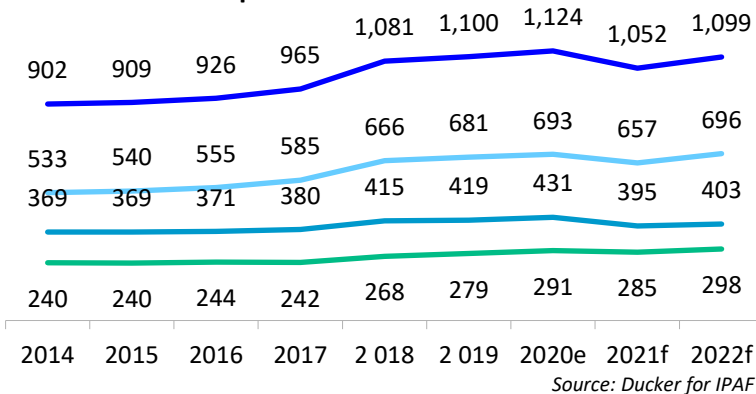


APPENDIX
IPAF Powered Access Rental Market
Report 2021 – *ITALY*

Italy – Construction statistics

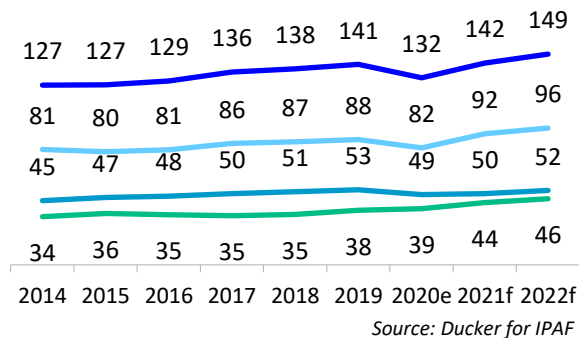
Both construction and the overall economy were impacted by the pandemic. However both sectors experienced a quick recovery in the final months of 2021 and this trend is expected to continue into 2022 and beyond.

Europe – Construction data

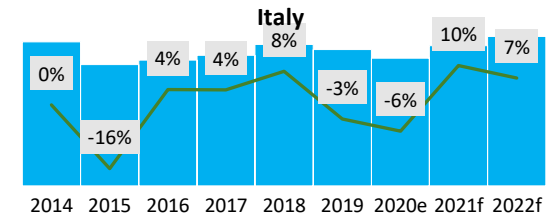


- Residential construction
- Non-residential construction
- Total construction
- Civil engineering / Major infrastructure

Italy



Construction pipeline (billions euros) based on Euroconstruct 2021 figures.



Italy GDP per Capita YoY % evolution

Source: FrontierView – Sept 2021.

CAGR: Compound annual growth rate



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IPAF powered access rental market report 2021

COUNTRY REPORT –
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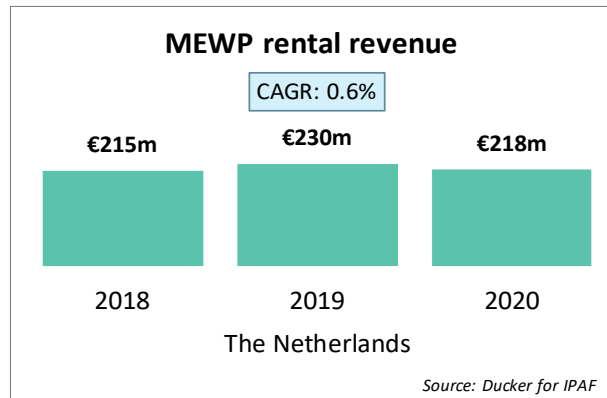


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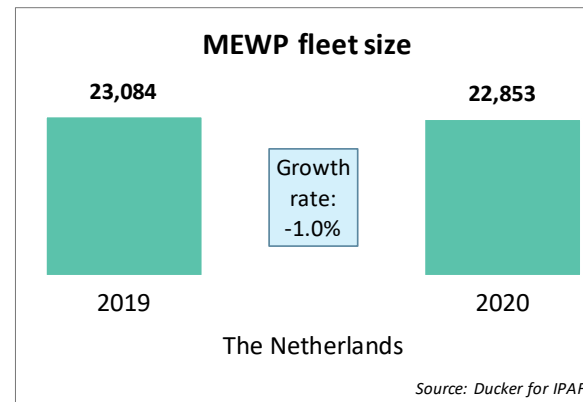
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The Netherlands – key findings

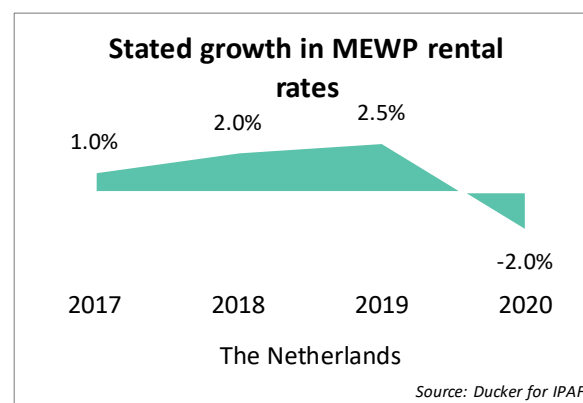
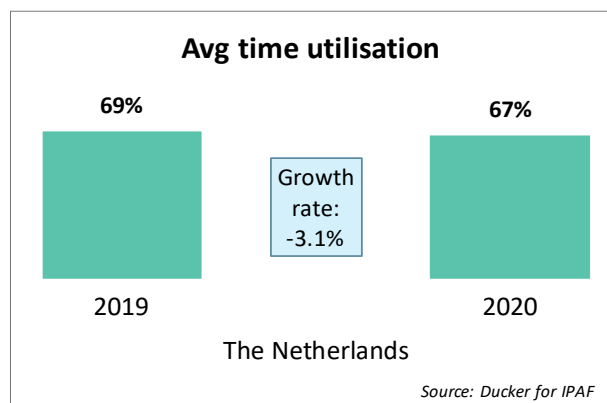
The MEWP rental market in the Netherlands in 2020 was impacted by Covid, but less severely than some other key European markets. Rental companies were able to maintain a healthy level of activity throughout.



CAGR: Compound annual growth rate

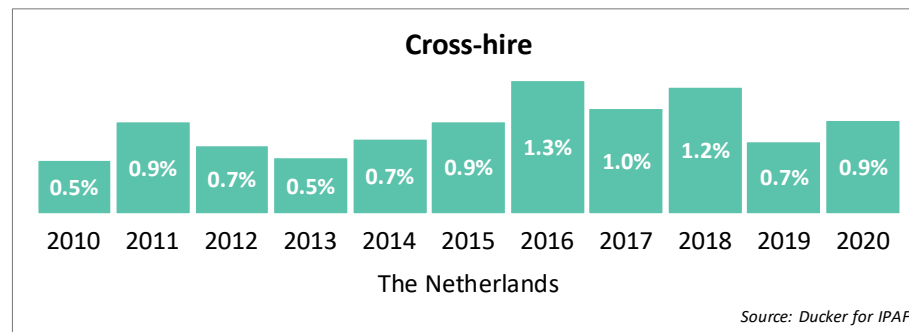
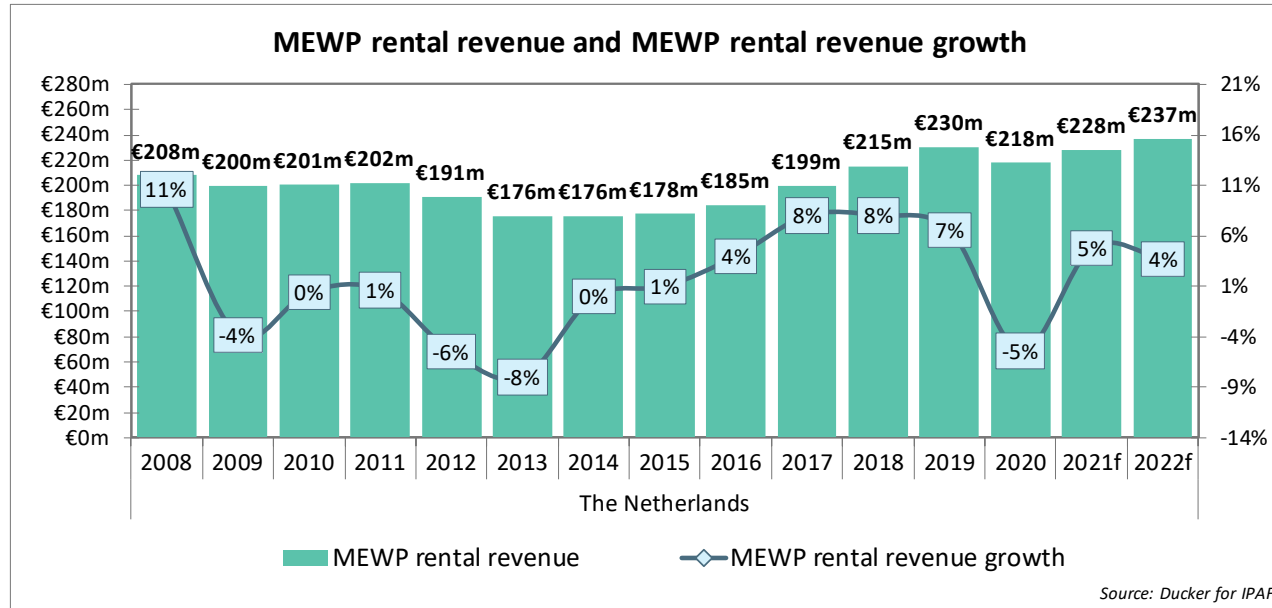


- All indicators decreased in 2020, the revenue being impacted by the reduction of fleet, as well as utilisation and rental rates drop.
- This decrease is rather small compared to other countries, with a continuous activity and a quick recovery from the lockdowns and Covid counter-measures.



The Netherlands – rental market value and growth

The value of the Netherlands MEWP rental market value fell by around 5% in 2020, but is expected to recover strongly to regain lost ground through the second half of 2021 and 2022, returning to pre-pandemic growth levels.

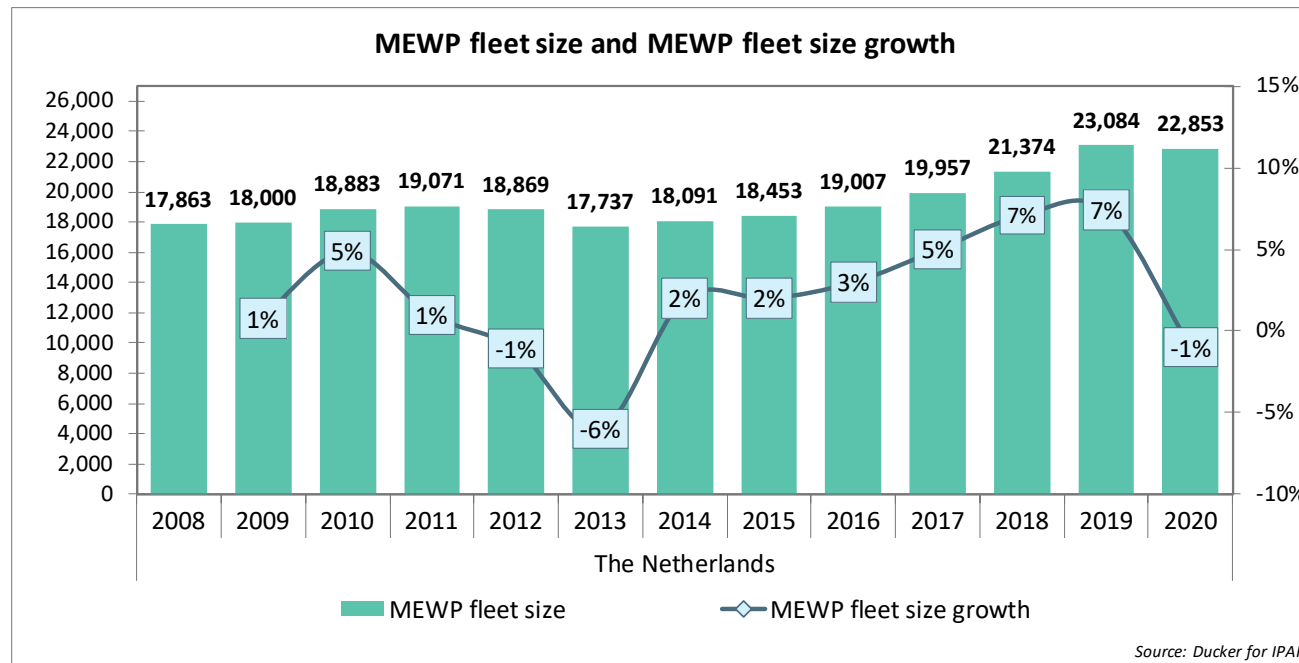


- The rental market in the Netherlands was impacted by Covid in 2020, with many companies reducing activity and halting fleet expansion.
- The steady growth seen over the years prior to the pandemic is expected to resume in 2022.
- With reduced demand and activity, cross-hire fell slightly between 2019 and 2020.

The Netherlands – market size in units

The overall fleet size fell by around 1% in 2020, on the back of steady growth in the years and months leading up to the pandemic hitting. Many Netherlands MEWP rental firms paused both fleet renewal and expansion until 2022.

- After steady fleet expansion between 2014 and 2019, rental companies did decide to defleet by disposing of some older machines and less-utilised MEWPs. Renewals were down on previous, leading to a slight reduction in fleet size.
- In 2021, fleet size should remain stable, with most rental companies not expecting to embark on investment in fleet expansion until 2022, when the strength of the post-pandemic economic recovery should be confirmed.

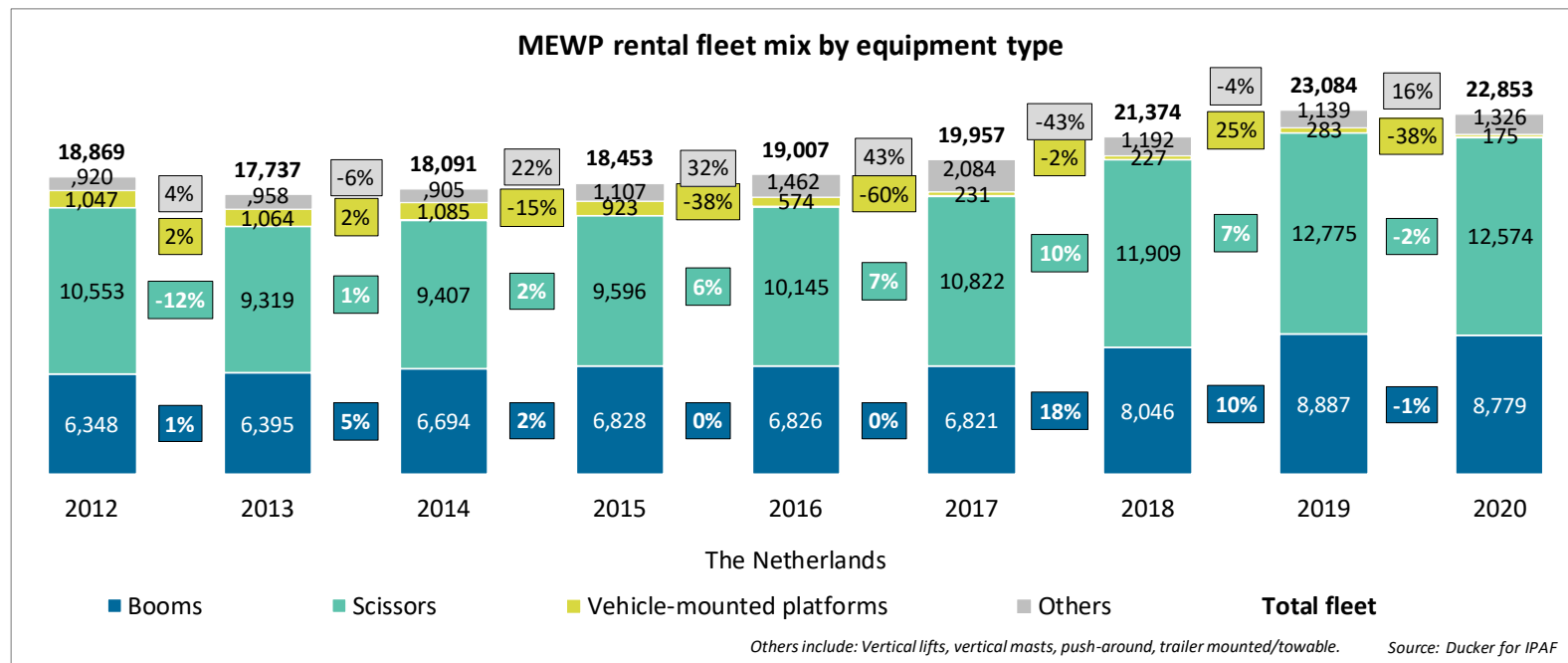


Included are powered access lifts: All booms, scissor lifts and vertical masts
Excluded: Low-level access equipment (<3m high), telescopic material handlers, forklifts, cranes, and MCWPs.

The Netherlands – market size in units

As fleet size shrank slightly due to reduced demand in 2020, the proportion of scissors and booms discarded or not renewed remained roughly even, meaning that fleet mix remained broadly the same as in previous years.

- Scissors are used significantly in data centres and non-construction applications, some saw reduced demand in 2020.
- Booms utilisation fell owing to a temporary stop on many construction sites during lockdown, but there was still a strong baseline demand for essential construction projects, maintenance of key installations and emergency repairs.



Included are powered access lifts: All booms, scissor lifts and vertical masts
Excluded: Low-level access equipment (<3m high), telescopic material handlers, forklifts, cranes, and MCWPs.

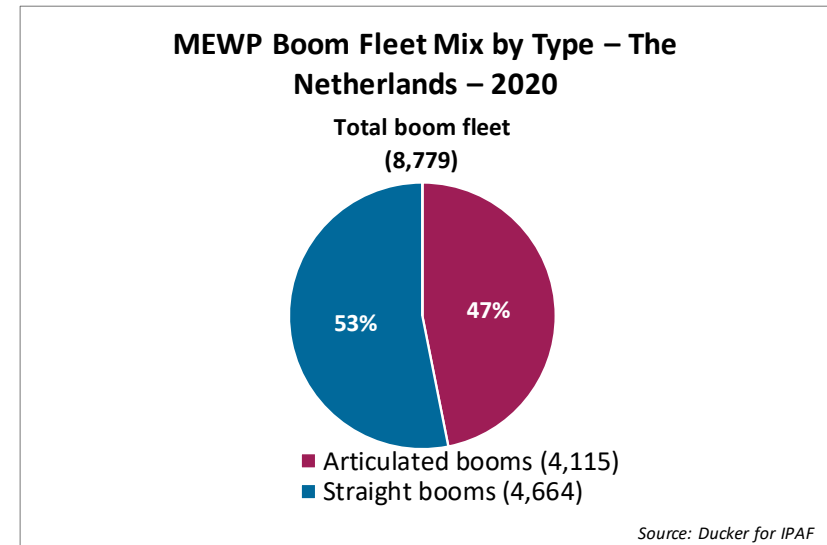
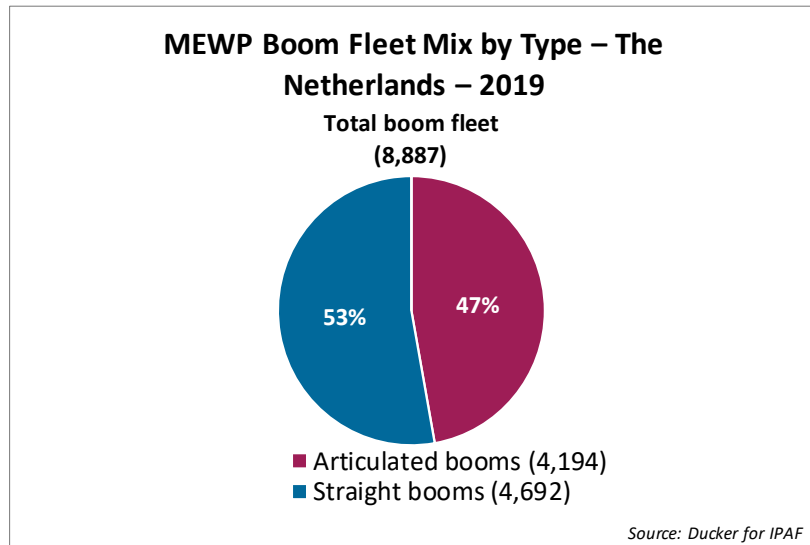
+X%

% unit growth, eg both scissors and booms fleet increased by 7% from 2017 to 2018.

The Netherlands – market size in units

The proportion of articulated and straight booms remained the roughly the same at end 2020 as in previous years. Demand for straight booms in the Netherlands is slightly higher than in some European markets.

- There is still a high demand for straight booms in the Netherlands, especially for high heights (above 16 metres).
- With the resumption of work on most construction sites, and catch-up expected for any delayed projects or backlog in construction pipeline the demand for both articulated and straight booms is expected to continue growing in 2021.



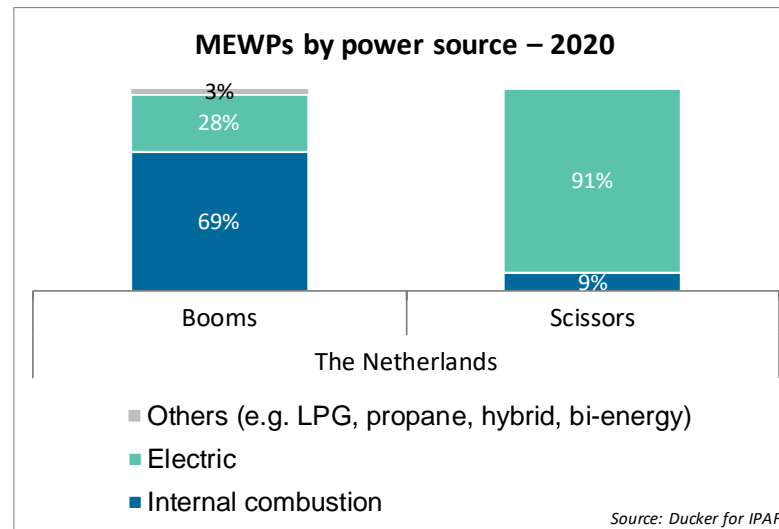
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“There is increased demand for booms over 16m and many companies don’t have them in their fleet due to the slightly lower profitability, but it is going to increase” – MEWP rental company manager

The Netherlands – power sources

The share of electric-powered equipment grew slightly in 2020 across the board. The Netherlands is at the forefront of Europe's shift towards electric-powered MEWPs, though hybrid MEWPs are proving less popular with customers.

- There is a clear trend towards electrification in the Netherlands, which was hampered to some extent by the pandemic and the pausing of fleet renewal and expansion. Most of the renewal activity saw scissors being replaced by electric-powered machines, while some booms were replaced by electric-powered machines on renewal.
- Hybrid machines are not as in demand from end clients, even though this type of machine is being pushed by some rental companies, as they are quite versatile. Concerns around maintenance and utilisation dampened demand.
- Despite the ongoing trend towards electrification, rental companies still have some difficulties finding electric booms to replace diesel ones owing to performance issues, especially for larger machines with the highest reach.



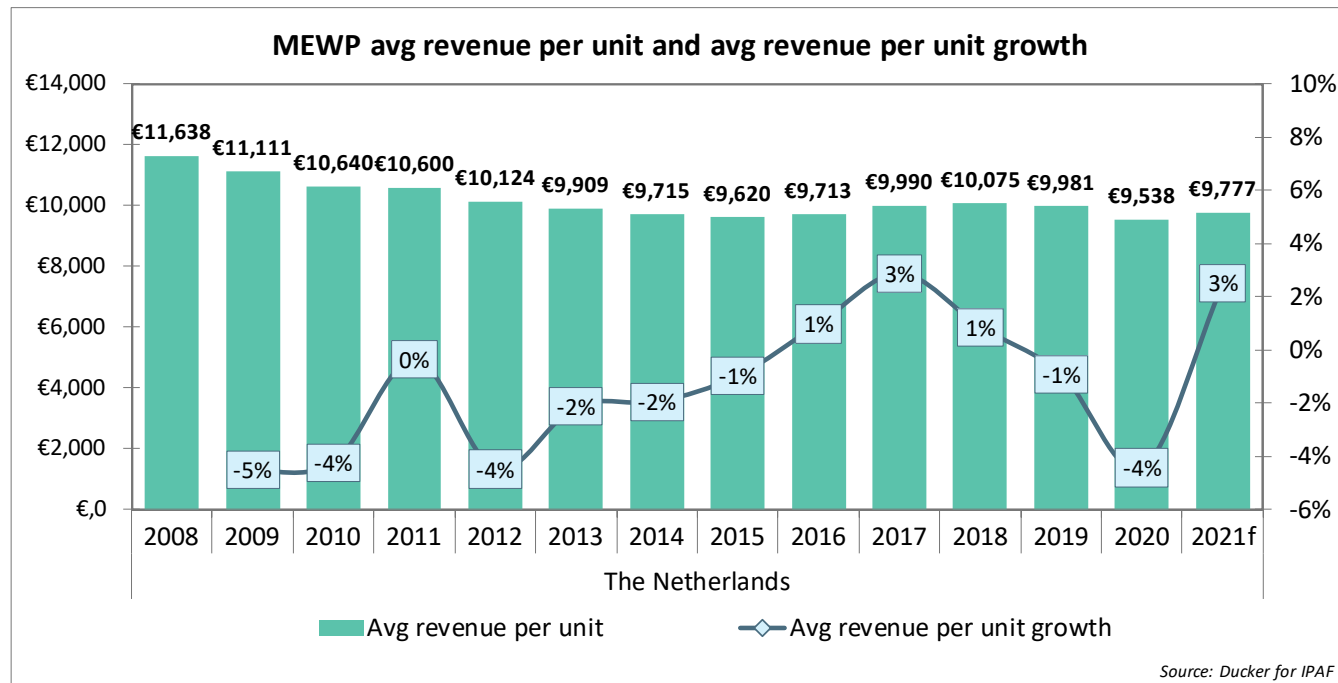
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“We aim to have a full electric fleet for booms within ten years, but it is not yet possible due to the lack of power of batteries and the lack of infrastructure to sustain it” – MEWP rental company sustainability manager

The Netherlands – revenue per unit

The average revenue per unit dropped by 4% in 2020 in the Netherlands, owing mostly to the twin downward pressures of falling utilisation and rental rates, though a halt on investment and fleet renewal limited the damage.

- Owing to falling utilisation and rental rates, average revenue per unit decreased in 2020 in the Netherlands.
- By freezing investment and placing a hold on major fleet renewal, Netherlands rental companies limited the fall in revenue per unit, and expect this indicator to begin increasing again in 2021 and throughout 2022.

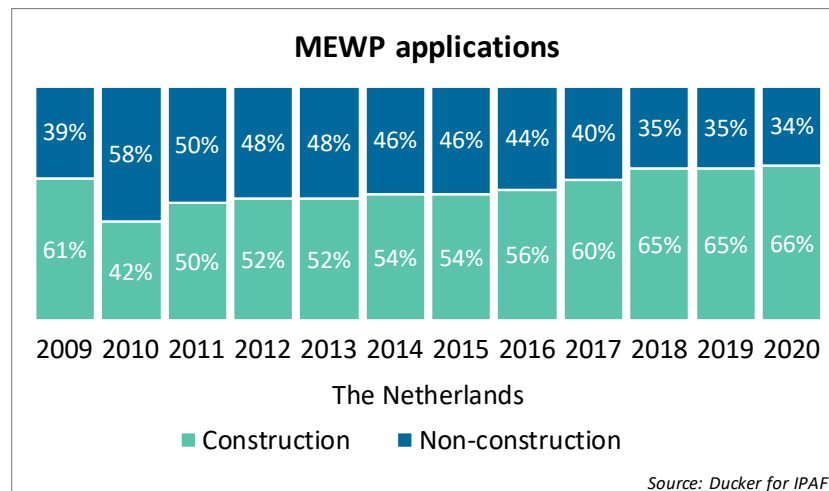


*Included are powered access lifts: all booms, scissor lifts and vertical masts
Excluded: low-level access equipment (<3m high), telescopic material handlers, forklifts, cranes and MCWPs.*

The Netherlands – applications

Non-construction sectors lost around a 1% share in overall MEWP applications during 2020, owing mainly to the disproportionate impact of the pandemic on sectors such as facilities management and industrial sectors.

- Both construction and non-construction sectors were impacted by the pandemic during 2020, but both saw a bounce-back that restored activity for the most part well before the end of the year.
- Emergency and essential construction projects kept going, but much non-essential construction including the building of new data centres construction was hampered, in particular due to the multi-national nature of these projects and their workforce.

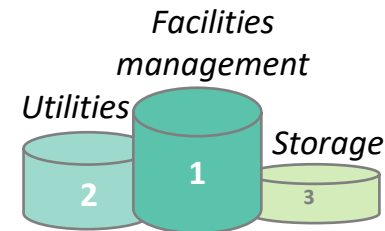


Share of rental revenue:

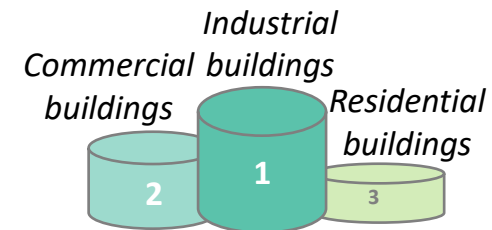
Non-construction includes industry, maintenance, cleaning, utilities, events.

Construction includes new-build and renovation; including residential, commercial, retail and industrial.

Main non-construction sub-sectors



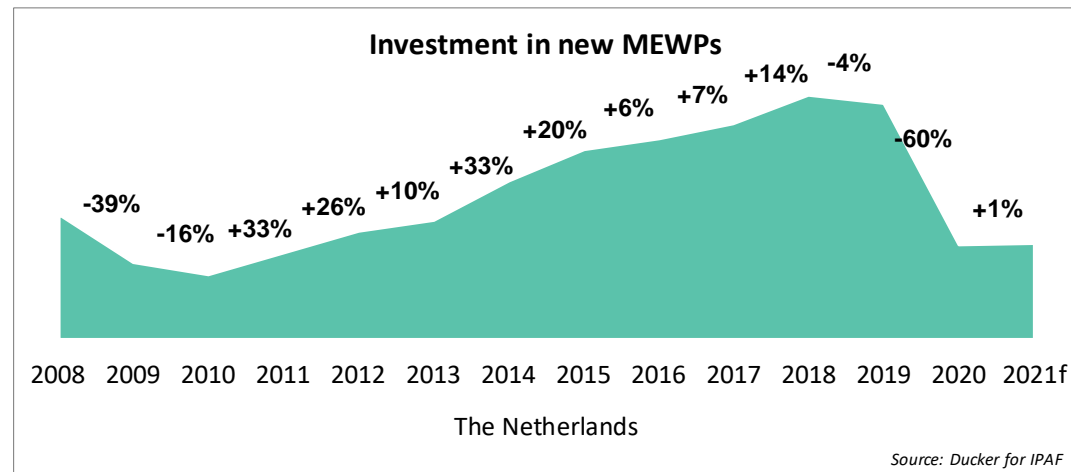
Main construction sub-sectors



The Netherlands – investment

Investment in new MEWPs fell by up to 60% in 2020 in the Netherlands, putting a firm brake on almost a decade of steady fleet expansion. Many companies have begun to invest cautiously once again in fleet growth in 2021.

- The main types of investment in 2020 were essential renewals of limited parts of the MEWP rental fleet and changing out older diesel-powered equipment for electric-powered MEWPs.
- In 2021, investment is expected to return to modest growth, but will mostly be restricted to renewing the fleet. Investment to significantly expand fleets or make wholesale moves towards all-electric and hybrid fleets is not anticipated before 2022, when the full economic fall-out of the pandemic is known.



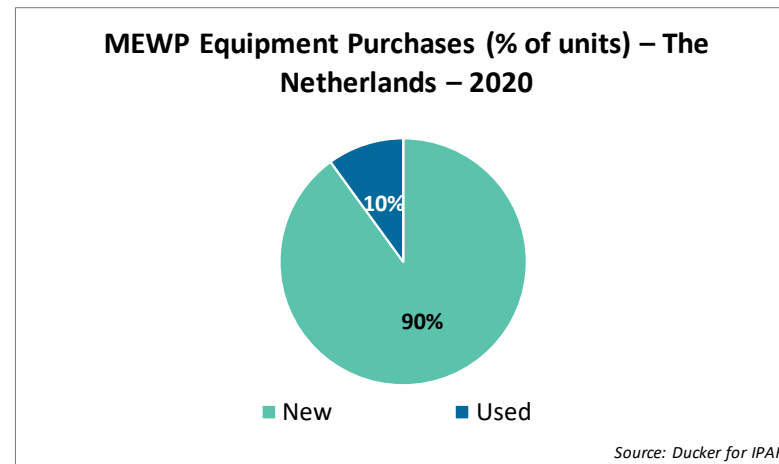
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“It is going to take a while before we recuperate from the past year, so we will continue investing for renewing, but not at 2019 rate” – MEWP rental company investment strategist

The Netherlands – equipment purchases

Across 2020 as whole, used equipment purchases grew by 5%. Where some rental companies looked to offload less profitable machines, others saw the opportunity to renew older equipment with quality used MEWPs.

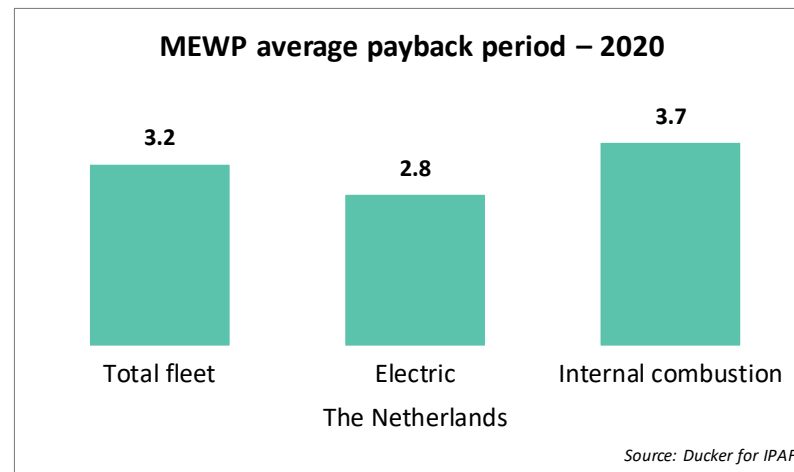
- Some rental firms decided to buy used MEWPs rather than new, showing financial caution due to the reduction of activity. This suited those companies seeking to move MEWPs on sooner than the usual retention period.
- This spike in the proportion of used equipment purchases is likely to be reversed in 2021, as rental companies once again prioritise buying new machines, supply chain delays and increased manufacturer lead-times notwithstanding.



The Netherlands – typical payback period

The overall fleet Return on Investment (ROI) is around three years and two months. Electric MEWPs on average offer a shorter payback period, owing to better average rental and utilisation rates than diesel-powered units.

- Electric MEWPs are shown to generally offer quicker ROI than diesel-powered machines, with an average payback period of around two years and eight months, compared to three years and seven months.



3.2 = 3 years and 2 months

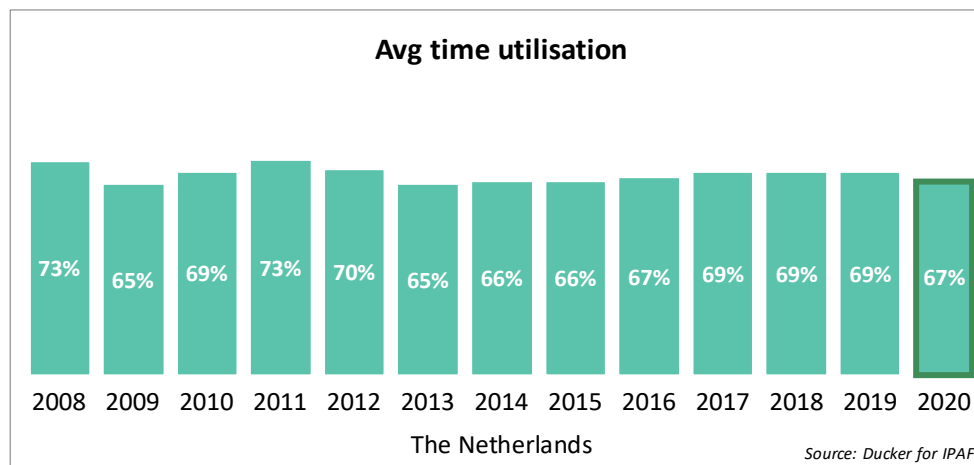
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“We’ve had a very stable payback period for several years, and it hasn’t changed” – MEWP rental company manager

The Netherlands – utilisation rates

In 2020, utilisation rates dropped by 2% on average, though the Netherlands market was not so adversely affected as some in Europe, owing to steady levels of essential construction, maintenance and utilities activity.

- Compared to other countries, Dutch rental companies maintained relatively high utilisation rates during 2020 and the worst of the pandemic, being able to rent their machines for essential construction, utilities and maintenance.
- Rental companies expect to exceed 2019 average utilisation rates by the end of 2021 or at the latest in early 2022, driven by new construction projects as well as pipeline catch-up for those put on hold during Covid.



Scissors : 66%

Booms : 67%

Definition: Physical number of machines out on hire as % of total number in fleet at any given time.

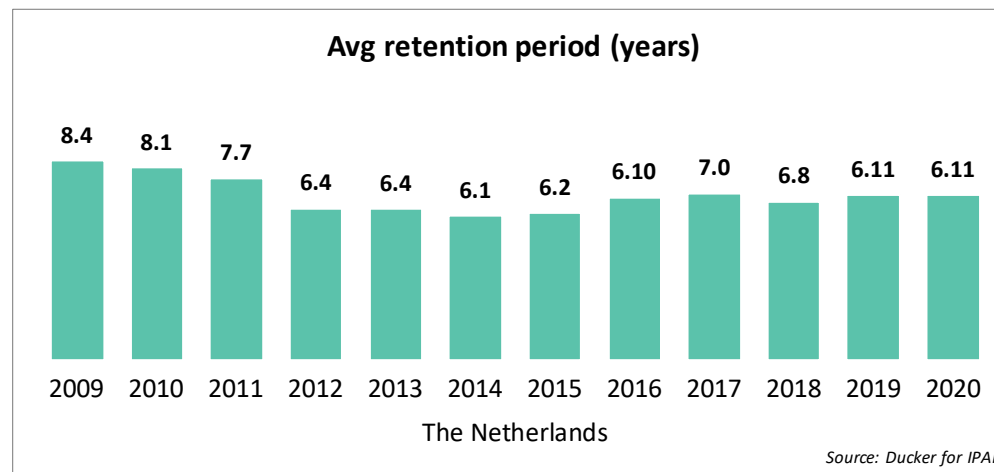
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“In 2022 I expect increasing utilisation rates because projects that were on hold will have restarted, as well as additional projects planned for 2022 and beyond” – MEWP rental company hire manager.

The Netherlands – retention period

The average retention period remained largely unchanged in 2020, at an average of six years from machines being bought new to being removed from rental fleets and sold on. This is relatively low among countries under study.

- The retention period hasn't changed in 2020, as there were no defleeting movement from the rental companies.
- It is expected to be growing within next years, as the machines that were not used during 2020 will be kept longer to have the same amount of utilisation.



6.11 = 6 years and 1 months

Definition: Period of time that a machine is kept in fleet = selling age if acquired new

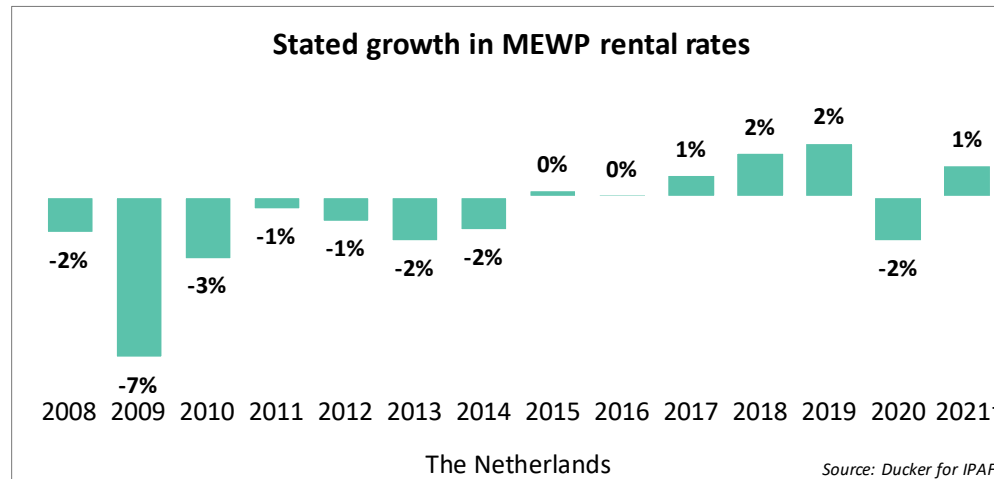
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“Considering last year and this, we will try to hold on to the machines for two additional years. They haven't been used as much, so it will be fine to keep them a bit longer” – MEWP rental company manager

The Netherlands – rental rates

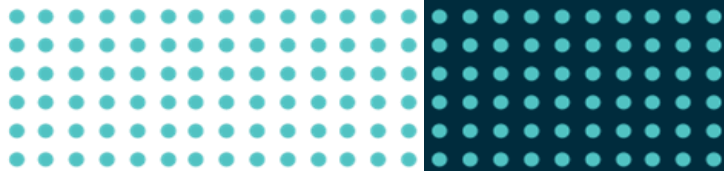
Rental rates dropped during 2020 during the worst of the pandemic, with a steady recovery since then and confidence about the future of the market during 2021 as a whole, and in 2022 and beyond.

- Before 2020, rental rates rising owing mainly to the transition to electric-powered equipment.
- The fall in activity and fierce competition within the market contributed to a suppression in rental rates across 2020.
- The market is expected to return to relatively modest rental rate increases in 2021, but rental rates won't return to pre-pandemic levels until 2022 at the earliest.



“

“You really have to compete on price because there are so many rental companies in a relatively small country. During Covid, prices dropped even further.” – MEWP rental company hire manager



A PERSPECTIVE FROM THE EDITOR OF
ACCESS INTERNATIONAL MAGAZINE
IPAF Powered Access Rental Market
Report 2021 – **THE NETHERLANDS**

- The Netherlands has consolidated itself as a centre of MEWP rental and manufacturing innovation and investment – a fact highlighted by the large number of related companies based in the country.
- According to the European Rental Association, there were significant falls in rental activity in 2020 across many European countries, particularly in the south, but The Netherlands, along with the Nordics and Germany, fared relatively well with a just a 2.5% drop on the previous year.
- The Netherlands is also a leading nation in terms of new industry developments, not least sustainability. This year, Boels Rental, which is based in the country, became the first rental company to offer electric telehandlers throughout Europe following an investment in JCB's recently launched JCB 525-60E model. Its electric fleet now includes 4.3 tonne wheel loaders, aerial platforms up to 20m and forklifts.
- Boels reported revenues of €1.2 billion in 2020, doubling last year's addition of Cramo, and says the pandemic had a "limited" impact on sales, which were down 6%. Boels says the acquisition of Cramo last year had diversified its products, customers and market segments and "the impact of the pandemic on total turnover remained limited".
- Specialist MEWP rental company Riwal is also intrinsically linked to innovation. At the beginning of this year the Netherlands-based company took delivery of JLG Industries' first 100% electric boom lifts, the EC articulating models being added to its rental fleets in The Netherlands and Denmark.
- Pedro Torres, Riwal CEO, said: "Our customers are increasingly demanding 100% electric machines to work at height, in order to execute their projects in the most sustainable way. As part of our Lifting Sustainability program, an increasing share of our fleet investment is in electric machines."

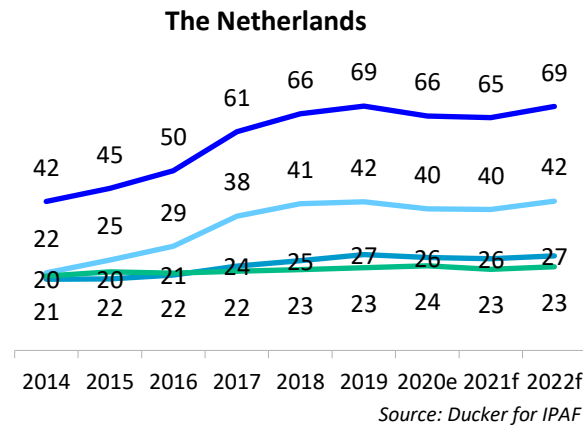
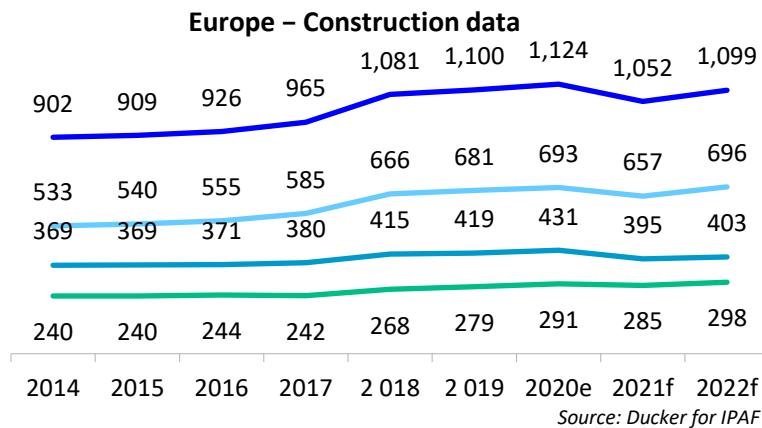
- Riwal is also delving further into digital solutions – an area that is shaping the modern access sector. My Riwal Parts webshop, offering original parts from the world’s largest MEWP manufacturers and a full service package, has this year been introduced in the Netherlands and is set to be rolled out further in Europe.
- The Netherlands has become the location of choice for many MEWP manufacturers and distributors, thanks to its convenient European links. For example new crawler-mounted boom lift manufacturer Rhinox has set up in the country with its first model, a 12.6m working height machine.
- Chinese manufacturers are also choosing the country to base their European businesses. Sinoboom and LGMG have set up subsidiaries in the country in recent years and are using it as a springboard to become major players on the continent.
- LGMG, speaking about the pandemic in The Netherlands, says the country has not experienced the economic pain it was expecting to following the pandemic. This is despite the major rental houses putting investment plans on hold in 2020. Rental rates held up.
- The company estimates that the rental revenue market in Netherlands dropped by around 10% at its worst, but growth followed at the tail end of 2020 and is continuing in 2021.
- As mentioned, electrification is a key element of the access industry in the near future, and LGMG says it is “seeing more of the industry moving towards it. We did see that Covid-19 delayed this slightly, but as we come out the end of the pandemic electrification will once again return to the fore.”



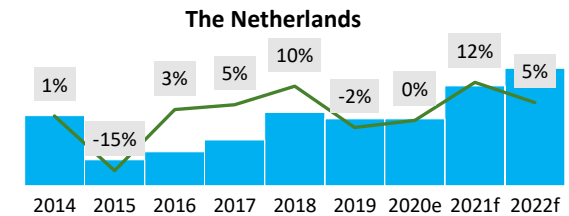
APPENDIX
IPAF Powered Access Rental Market
Report 2021 – **THE NETHERLANDS**

The Netherlands – Construction statistics

Total construction in the Netherlands fell slightly in 2020, owing to the hiatus caused by the pandemic and attendant public health restrictions, but overall GDP per capita growth remained stable at 0%.



Construction pipeline (billions euros) based on Euroconstruct 2021 figures.



Netherlands GDP per Capita YoY % evolution

Source: FrontierView – Sept 2021

CAGR: Compound annual growth rate

- Residential construction
- Non-residential construction
- Total construction
- Civil engineering / Major infrastructure



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COUNTRY REPORT – Nordic Region

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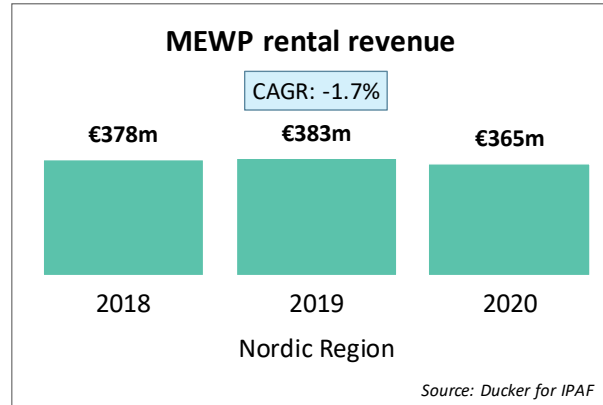


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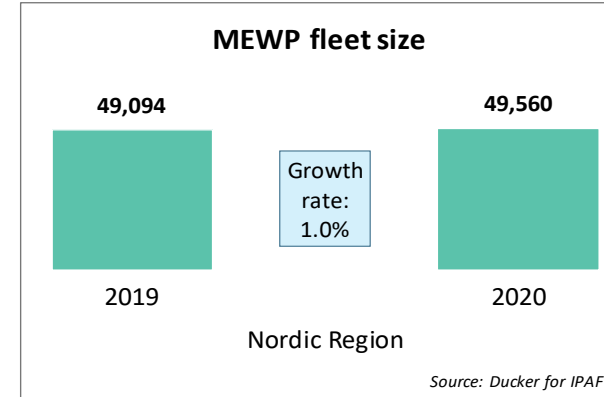
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Nordic Region – key findings

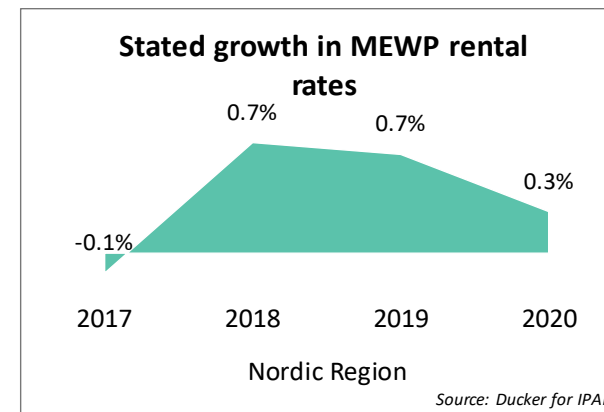
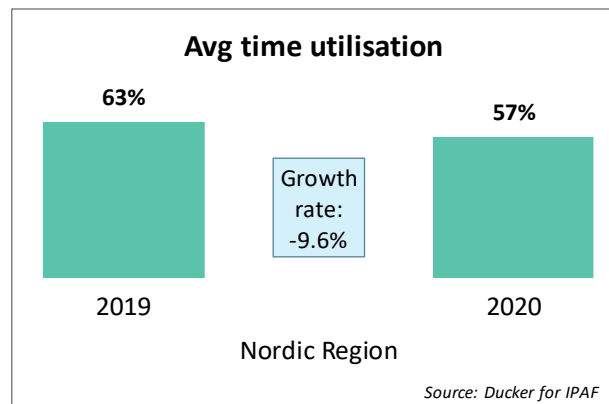
During the pandemic in 2020, the Nordic MEWP rental market performed relatively well, maintaining positive fleet dynamics and overall rental rate growth despite a 6% decline in utilisation rate.



CAGR: Compound annual growth rate

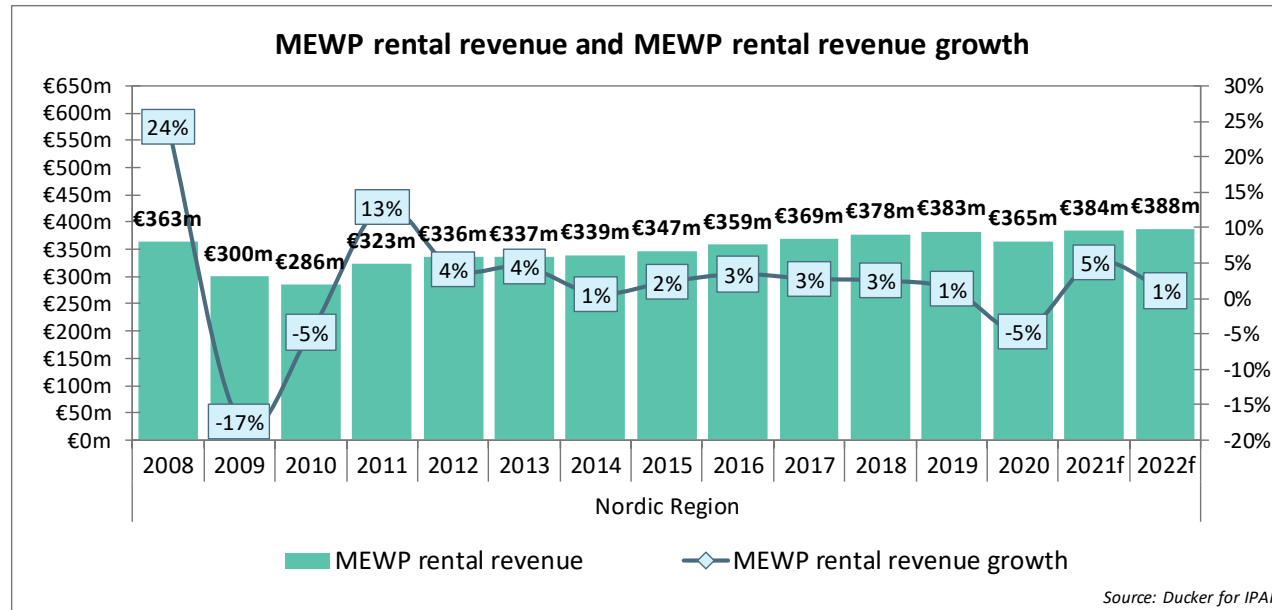


- In 2020, MEWP rental revenue was affected by pandemic-related downtime, but is expected to recover quickly and remain stable, with slow but steady growth over the next few years.
- Falling utilisation rates have limited increases in rental rates. Price growth is also affected by the ongoing consolidation trend in the region, with larger companies helping to keep prices suppressed.

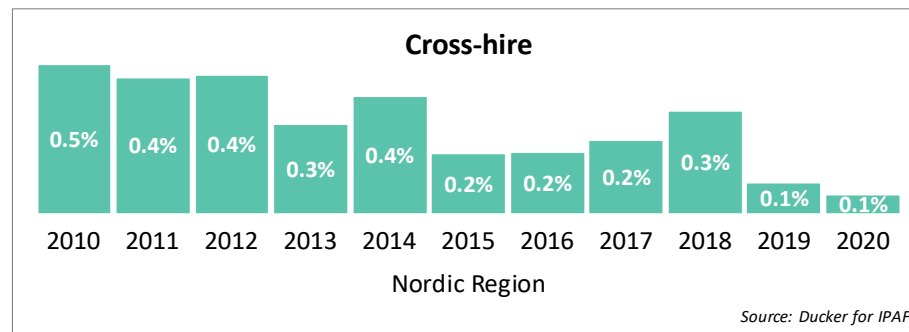


Nordic Region – rental market value and growth

Overall revenue across the region dropped by 5% in 2020, but the market is expected to bounce back and could even regain pre-pandemic levels by the end of 2021 if the current rate of recovery is not hampered by supply chain issues.



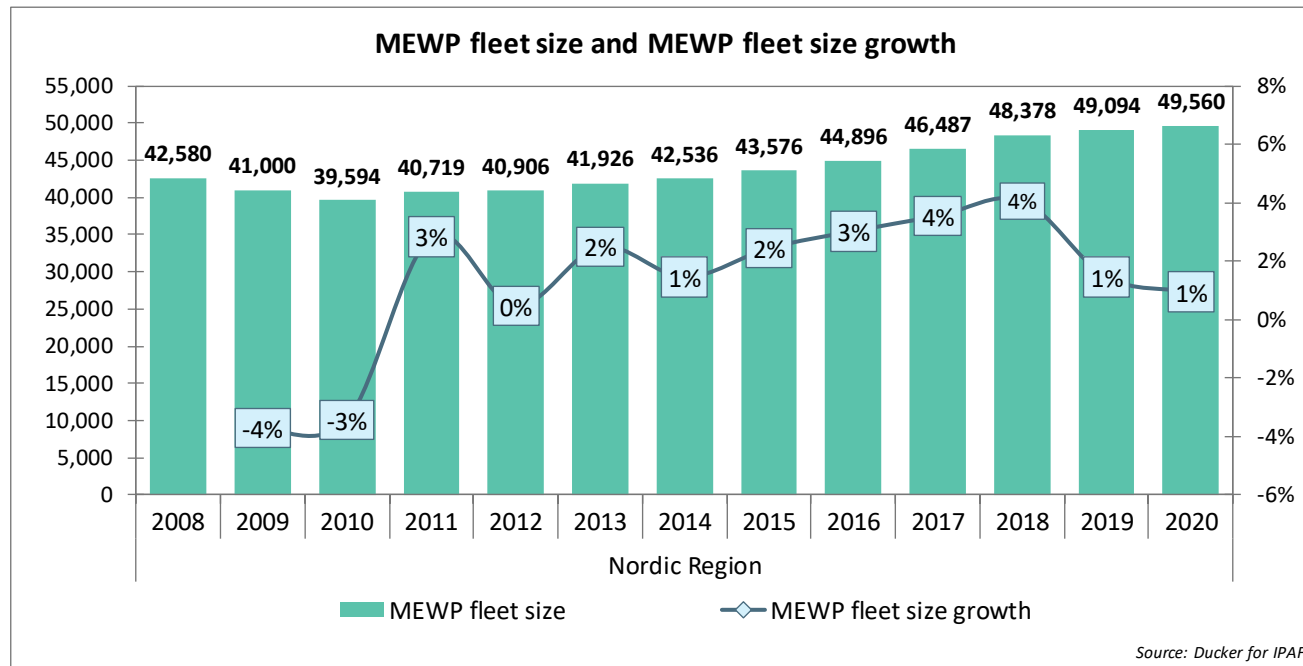
- Out of all countries in the region, Denmark and Norway were hit the hardest by the pandemic, with 8% and 7% decreases in market revenues respectively.
- Swedish and Finnish markets both experienced a 3% decline in revenues.
- The level of cross-hire was already low in 2019, and pandemic restrictions made moving machines and people undesirable, limiting cross-hire to just 0.1%.



Nordic Region – market size in units

The total size of the Nordic MEWP fleet increased by 1% in 2020, increasing by almost 500 units, as many companies pressed ahead with cautious investment in fleet expansion despite the disruption of the pandemic.

- After several years of consistent growth, the average fleet size in the region now appears stable and balanced: This indicator did not shrink during the pandemic year, with moderate growth of 1% forecast to be sustained in 2021.

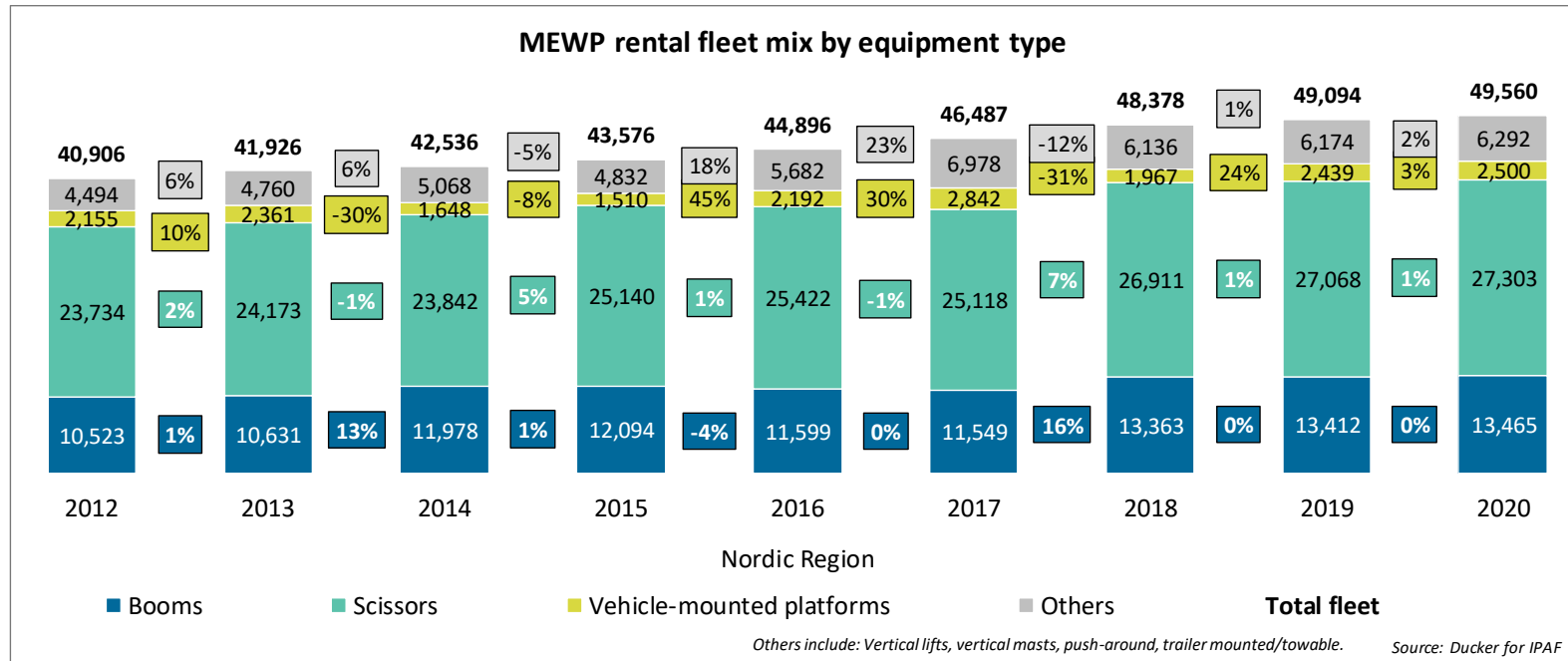


Included are powered access lifts: All booms, scissor lifts and vertical masts
Excluded: Low-level access equipment (<3m high), telescopic material handlers, forklifts, cranes, and MCWPs.

Nordic Region – market size in units

Fleet mix remained stable between 2019 and 2020, with a significant prevalence of scissors over booms. Unusually for European markets, scissors outnumber booms by around two to one across the Nordic region as a whole.

- Nordic fleets are dominated by scissors, with booms accounting for just 27% of the total Nordic MEWP fleet.
- The share of booms is higher in Denmark and Norway at around one third of the total (34% and 33% respectively), where these machines are most typically used in construction and infrastructure maintenance applications.



Included are powered access lifts: All booms, scissor lifts and vertical masts
Excluded: Low-level access equipment (<3m high), telescopic material handlers, forklifts, cranes, and MCWPs.

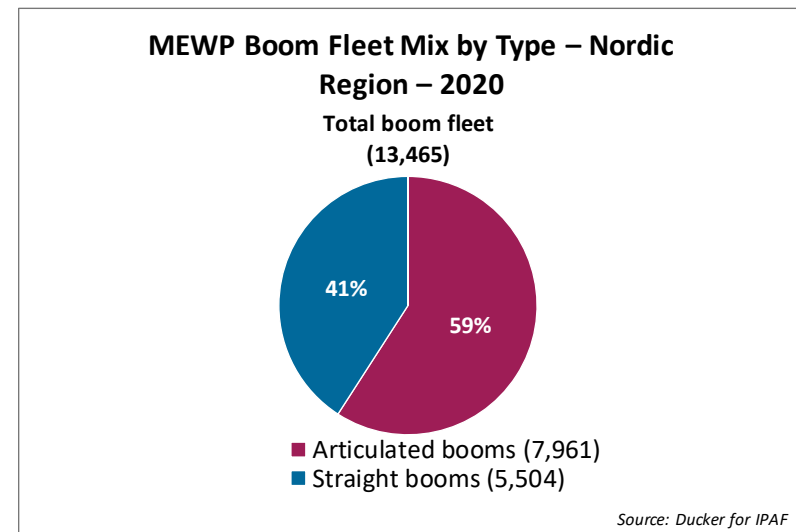
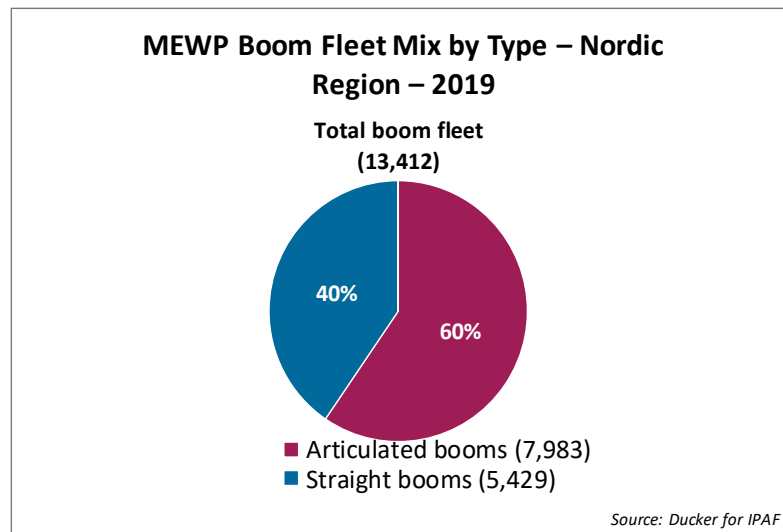
+X%

% unit growth, eg both scissors and booms fleet increased by 7% from 2017 to 2018.

Nordic Region – market size in units

In the past year, the total number of booms in the Nordic region changed by only a handful of units, with articulated booms accounting for 59% of the total boom fleet, down very slightly (1%) on the previous.

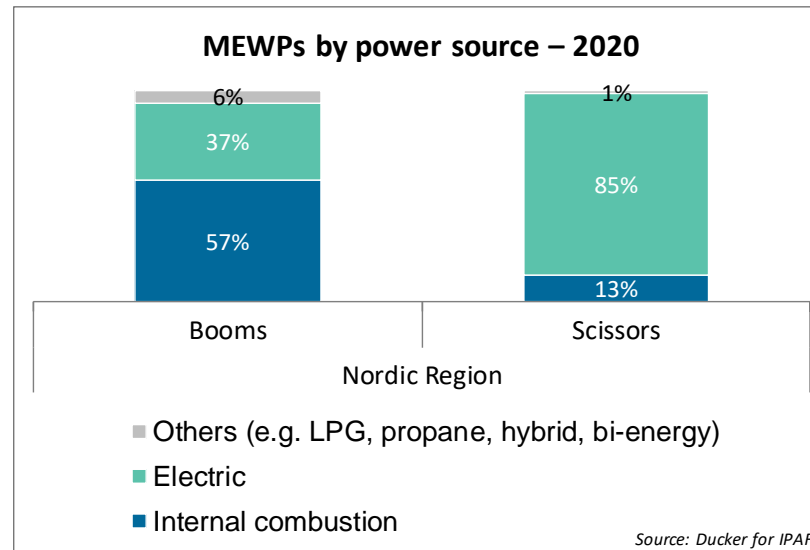
- By the end of 2020, the total boom fleet size in the Nordic region stood at around 13,465 units, with articulated booms being favoured over straight booms, accounting for a roughly 60:40 split in the boom fleet.



Nordic Region – power sources

The penetration of alternative energy sources as a share of the total fleet is by far the highest level in Europe, and indeed the world. The Nordic countries have traditionally been early adopters of “green” technologies.

- The Nordic region is traditionally praised across Europe for its early adoption of green power sources in MEWPs, which includes electric and hybrid engines.
- By the end of 2020, just 13% of scissors in the total fleet remained powered by internal combustion.
- The highest share of electric equipment is found in Denmark (45% for booms and 90% for scissors), while Finnish companies have significantly more hybrid boom units than other countries in the region, at around 15% of the total.



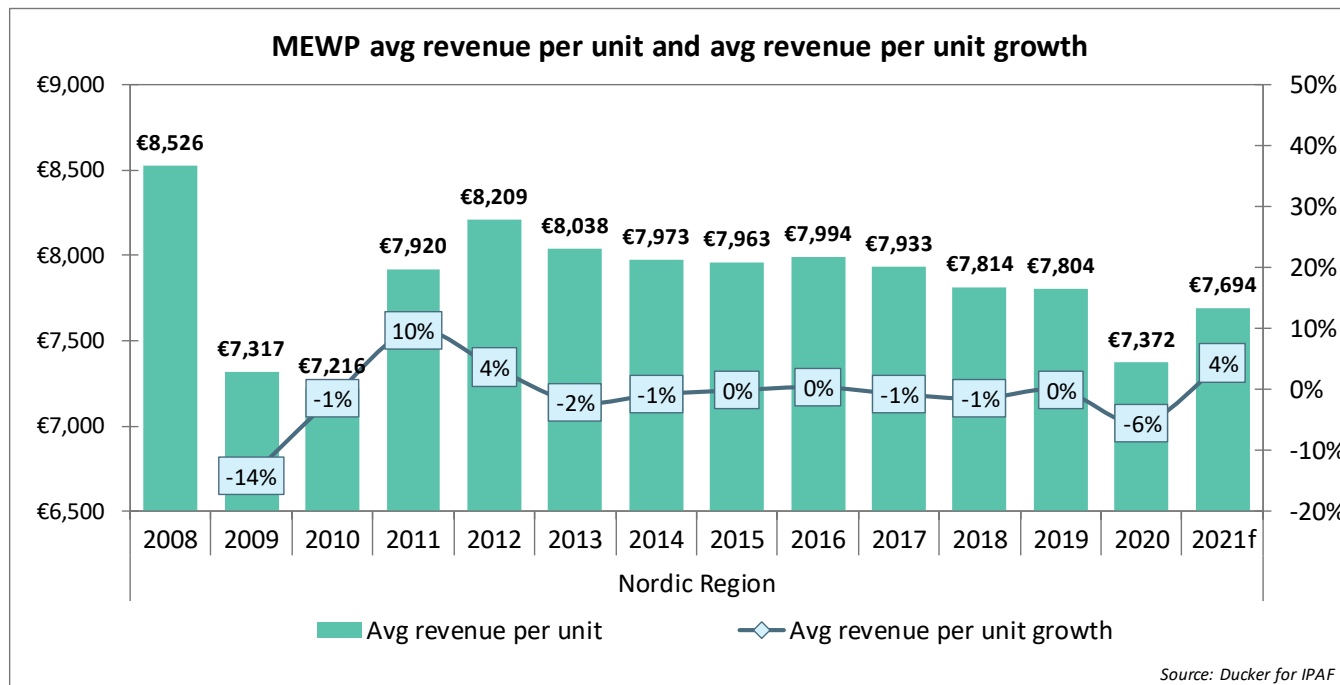
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“Favouring electric and hybrid models has been general practice for years.” – Finnish rental company manager

Nordic Region – revenue per unit

Average revenue per MEWP unit in the Nordic region in 2020 stood at €7,300 per year, representing a 6% decrease on 2019's figure, owing to the pandemic and the associated decline in utilisation rate.

- As utilisation rates dropped in 2020, the average revenue per MEWP unit has decreased by around 6% year-on-year.
- The market is expected to bounce back in 2021, with average revenues forecast to grow to €7,700 per unit.



Included are powered access lifts: all booms, scissor lifts and vertical masts
Excluded: low-level access equipment (<3m high), telescopic material handlers, forklifts, cranes and MCWPs.

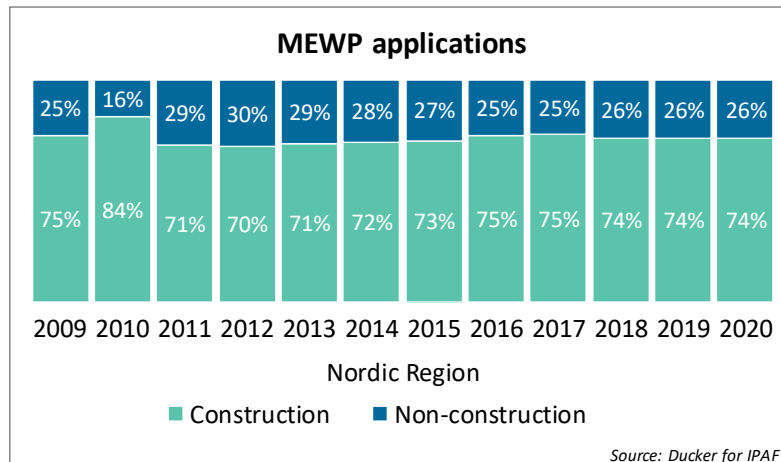


“Prior to the pandemic, construction was booming in Denmark. There were fewer construction projects in 2020, but we are almost back to pre-pandemic levels now and expect more growth.” – Danish MEWP rental company manager

Nordic Region – applications

Three quarters of rental market revenues in the region are derived from construction-sector end clients, which amounts to very nearly three-quarters of all MEWP rental revenue across the region as a whole.

- Construction applications strongly prevail across the region, accounting for 74% of total MEWP rental revenue. The construction of data centres is noted as an emerging and ongoing revenue source. It has also been reported that, to compensate for any decline in this market, national governments have committed to many national infrastructure and major public construction projects.
- In terms of non-construction applications, facilities management remains the primary source of revenue.

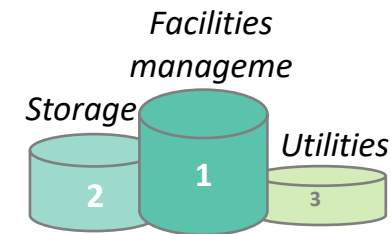


Share of rental revenue

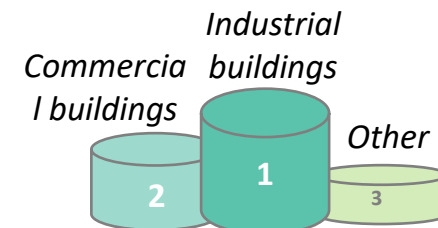
Non-construction includes industry, maintenance, cleaning, utilities, events.
Construction includes new-build and renovation; including residential, commercial, retail and industrial.



Main non-construction sub-sectors



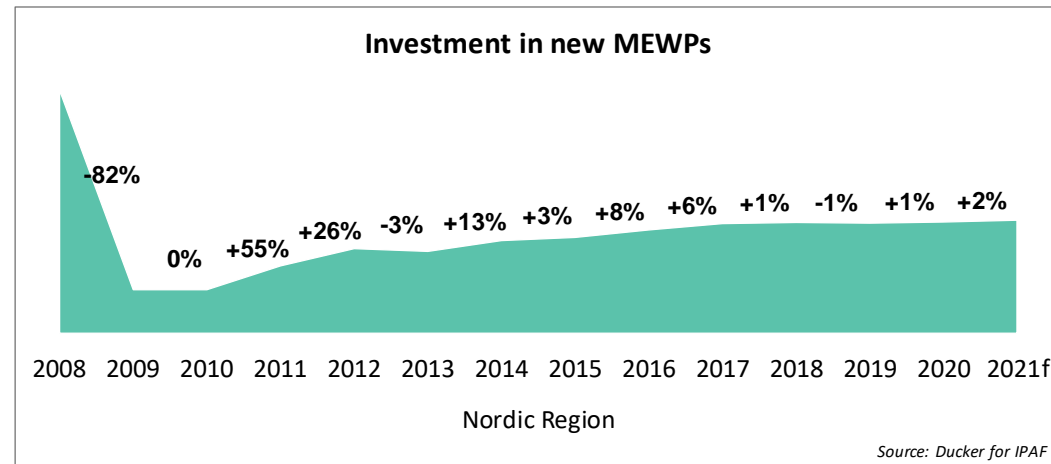
Main construction sub-sectors



Nordic Region – investment

The level of investment in the region remains robust, and was maintained at around 1% growth across 2020 as a whole, and with most respondents predicting this positive growth trend will continue along similar lines in 2021-22.

- Investment held up surprisingly well and was not shown to have dropped across 2020 as whole, maintaining around 1% growth for the year as a whole; on the other hand, growth is predicted to track a similar modest trend of around 1% across the next one to two years for the Nordic region combined.



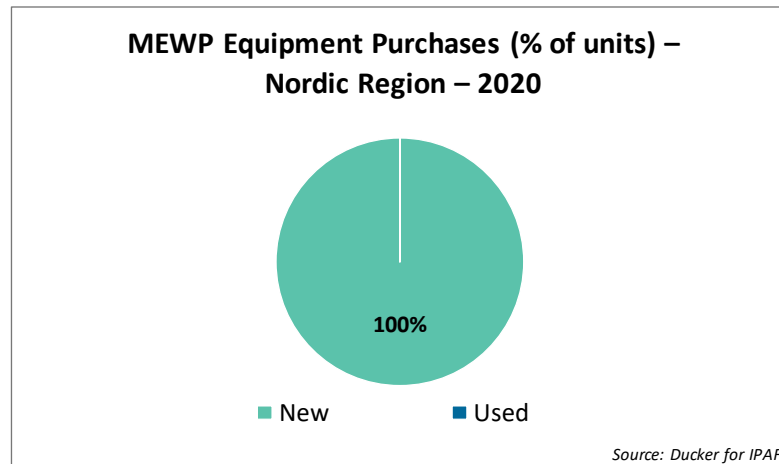
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“We will observe the situation in the country and the general trends in the industry before taking any significant decision on further investment.” – Norwegian MEWP rental company investment strategist.

Nordic Region – equipment purchases

Driven by the sustainability trend, the average Nordic rental company typically only buys brand new equipment, as it offers the most advanced clean powered sources and is therefore more environmentally friendly to operate.

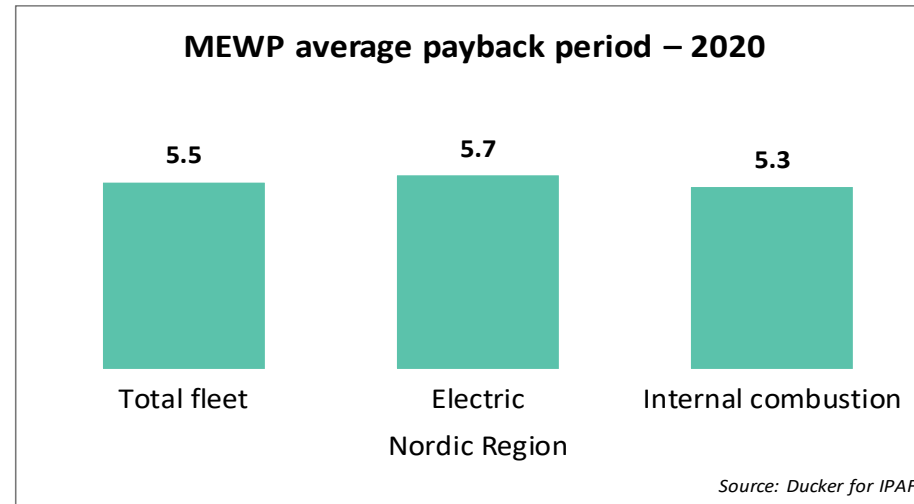
- General practice in the Nordic markets is to buy new equipment only, as it offers better technology and is expected to have higher resale value in the future.
- In light of tightening CO₂ emissions regulations, older diesel-powered MEWPs are becoming less attractive because they are not in such high demand, are less versatile and command lower rates than newer, greener MEWPs.



Nordic Region – typical payback period

Typical payback period has been increasing over the past few years and now stands at five years and five months on average. While all-electric machines are more in demand, they are more expensive than diesel-powered MEWPs.

- The gap between payback period of electric and internal combustion engine MEWPs is actually increasing.
- Electric-powered machines are becoming more readily available and can compete in terms of performance more closely than diesel counterparts, but this incurs a price premium, especially for larger MEWPs with greater reach.
- At the same time, because of the relatively high penetration rate of electric MEWPs in Nordic fleets, rental rates for smaller electric equipment is slightly decreasing, leading to longer average payback periods than in previous years.

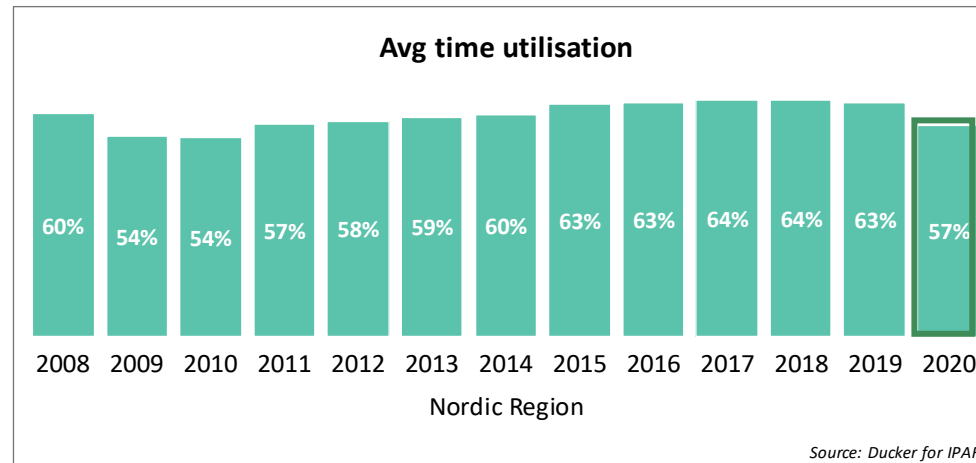


4.7 = 4 years and 7 months

Nordic Region – utilisation rate

Average utilisation rate across the region fell by 6% in 2020, to stand at just 57%; below the industry sweet spot of around 63-66% (two-thirds usage to one-third maintenance/transportation ratio) preferred in European markets.

- Even though the rental industry across the region relies heavily on construction, rental companies experienced an overall decline in utilisation rate in 2020, as commercial and events activities slowed in Q2 and Q4 in particular.
- In the countries under study, Norwegian companies were hit hardest, with utilisation rate dropping by around 10%.
- Swedish companies performed slightly better, seeing just a 5% decline in utilisation, as less down-time occurred in the country's construction and other industries, owing to much lighter Covid-19 restrictions than in other countries.



Scissors: 57%

Booms: 56%

Definition: Physical number of machines out on hire as % of total number in fleet at any given time.

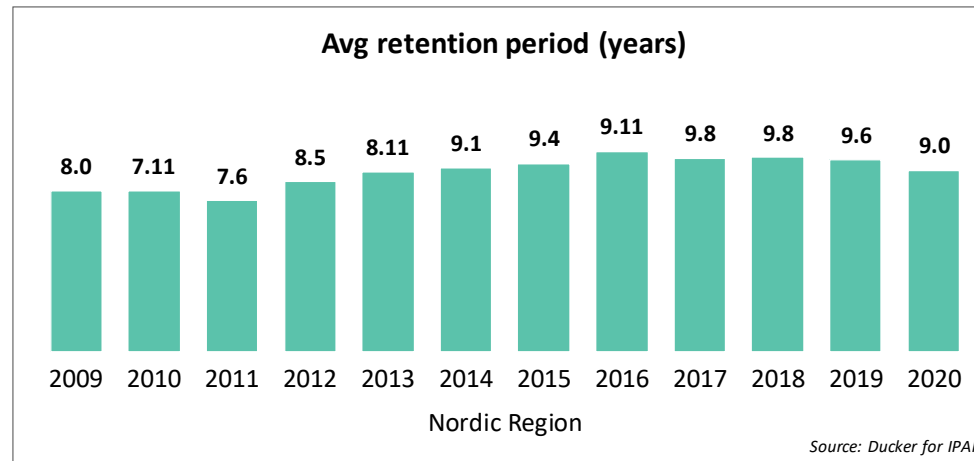
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“Even though the construction sector was not as affected as many other sectors during the pandemic, we have experienced a certain level of stagnation and decline.” – Norwegian MEWP rental company hire fleet manager

Nordic Region – retention period

The average retention period has decreased to around nine years across the Nordic region. This is mainly down to the zealous pursuit of all-electric fleets, which has not been significantly disrupted by the pandemic or its after-effects.

- Average retention period decreased to nine years. While pandemic-related difficulties in procuring new machines led to increased retention periods in other countries, these had no noticeable impact in the Nordic countries.
- The trend to shorter retention times is driven in large part by the ongoing electrification of fleets. As more machines of all different sizes, capability and type are becoming available utilising electric and hybrid power sources, MEWPs with internal combustion engines are being replaced ahead of schedule and steadily phased out of the fleet.



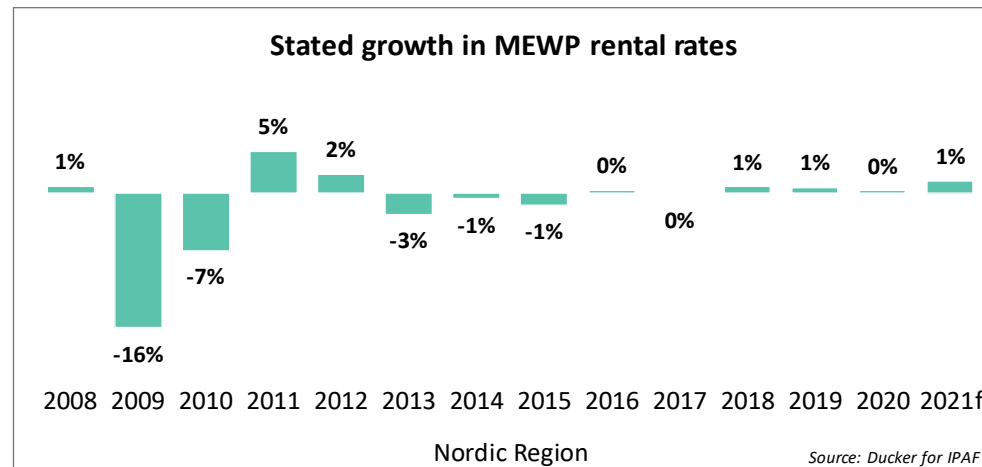
9.0 = 9 years and 0 month

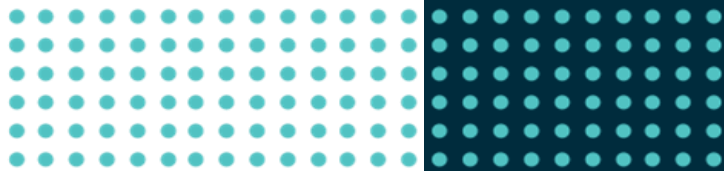
Definition: Period of time that a machine is kept in fleet = selling age if acquired new

Nordic Region – rental rates

MEWP rental rates have changed little since 2013, fluctuating by 1% year on year at most. In 2020 rates remained static but a return to modest growth of 1-2% is forecast for 2021, a return to the sorts of levels seen in 2018-19.

- MEWP rental companies were able to maintain stable prices even through the pandemic, and growth is expected to pick up slightly in 2021
- Rental rates are influenced by two opposite trends: price pressure in the market, created by player consolidation, and slow fleet growth that is driving up rental companies' bargaining power





A PERSPECTIVE FROM THE EDITOR OF
ACCESS INTERNATIONAL MAGAZINE
IPAF Powered Access Rental Market
Report 2021 – *NORDIC REGION*

- A clear message in Europe is that the countries which fared better during the Covid-19 pandemic in 2020, in particular the northern Nordic nations, have seen less year-on-year rental revenue growth in 2021 than other countries in the south of the continent, recovering from more significant falls.
- In its first quarter financial results of 2021, Loxam said its revenues in Sweden, Norway, Finland and Denmark, the territory largely comprising the Ramirent business Loxam acquired in mid-2019, fell by 8.2%. The reason for this negative performance early in 2021 was that these nations experienced fewer pandemic restrictions during 2020 than other European countries. In addition, the region experienced a mild winter in 2020, with the following winter in 2021 being much harsher, therefore adversely affecting business.
- According to the European Rental Association (ERA), rental activity in the Nordic countries, along with Germany and the Netherlands, fell by less than 2.5% in 2020, compared to, for example France, which fell 14%.
- Likewise, the Committee for European Construction Equipment (CECE) states that countries in which there was a lesser impact last year, are seeing less of a rebound this year, with Nordic companies below the average in terms of second-quarter trends. However, it reflects a healthier environment a year ago, therefore should not be read in a negative light, CECE says. Indeed, the Nordic region remains an attractive area of investment thanks to its stability and opportunities.

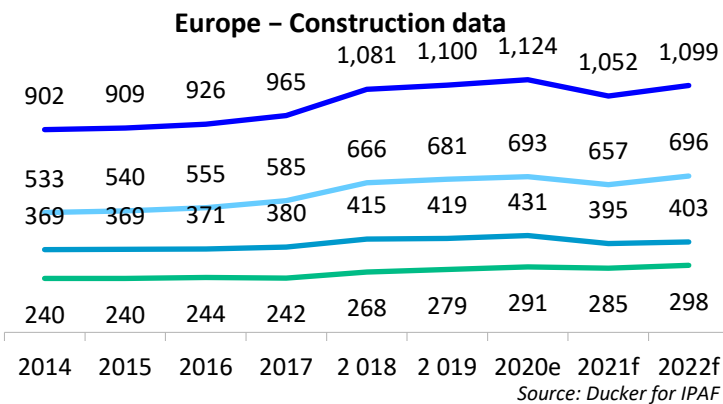
- In June, Loxam made two investments in the region, first expanding its Danish business with the acquisition of JM Trykluft, which runs a string of general plant branches and six specialised locations for access and portable accommodation. It was followed by Loxam's Nordic subsidiary Ramirent's buyout of MaskinSlussen, a general rental business in western Sweden.
- The Nordic region is also a hub of aerial platform production, with numerous manufacturers of spiders and specialist equipment, mast-climbing work platforms (MCWPs) and vehicle-mounted MEWPs. It remains an appealing destination for producers based outside the region. In September, Ahern, owner of MEWP manufacturer Snorkel and US-based Ahern Rentals, officially opened its Denmark subsidiary. That followed Ahern's acquisition of its then distributor KH Lift earlier this year. Apart from Snorkel, Ahern Denmark also distributes Denka Lift and EuropeLift trailer-mounted lifts.
- Added to that, the Nordics are leaders in sustainability, with ambitious emission regulations and innovations. For example, a new 20-storey-high timber skyscraper, said to be one of the world's tallest timber buildings, has just been opened in the north-east of Sweden. The Sara Cultural Centre in Skellefteå is made entirely of locally and sustainably sourced timber.
- Returning to the subject of access equipment, farming company Nordic Harvest has just built the largest indoor vertical farm in Europe, at Grønttorvet in Denmark. The farm consists of a 14-storey racking system in 4,950 square meters of growing space for plants and herbs. Contractors used Genie scissors to construct it, and the farm's operator now uses them to harvest its crops. Giving new meaning to the term powered access rental market growth!



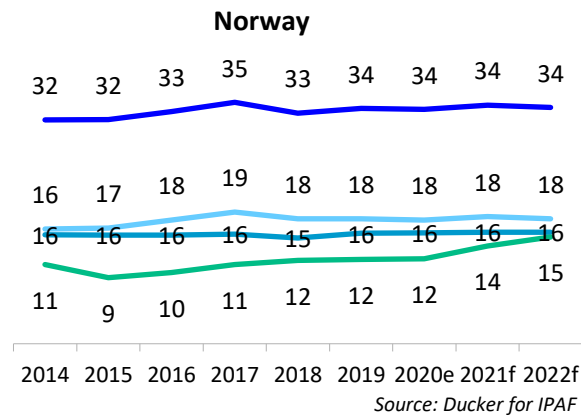
APPENDIX
IPAF Powered Access Rental Market
Report 2021 – *UK*

Norway – Construction statistics

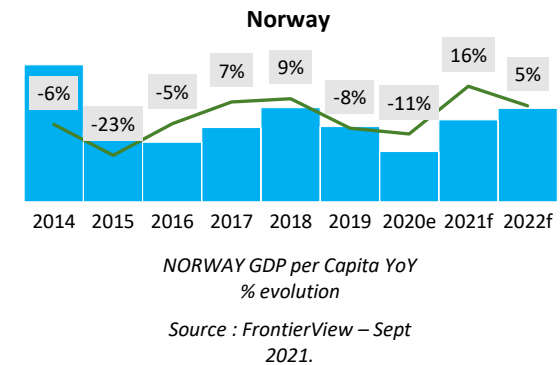
Norway's construction sector slightly underperformed against the wider European context, with slight decreases in residential and commercial construction offset by sustained growth in civil engineering and infrastructure works.



- Residential construction
- Non-residential construction
- Total construction
- Civil engineering / Major infrastructure



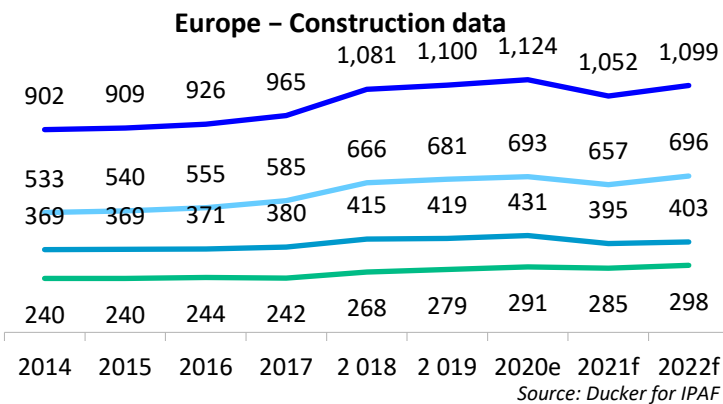
Construction pipeline (billions euros) based on Euroconstruct 2021 figures.



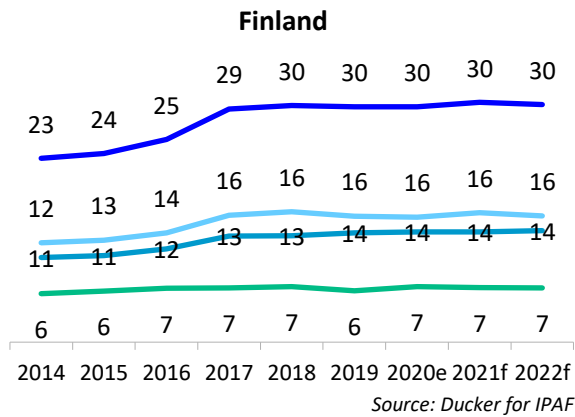
CAGR: Compound annual growth rate

Finland – Construction statistics

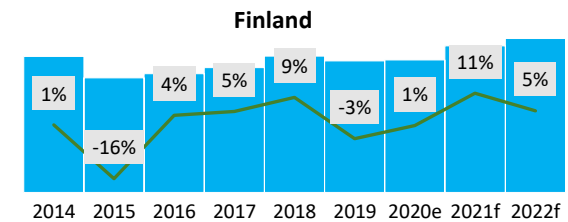
Finland's construction sector largely flatline across the past five years, with no appreciable growth or decrease in the residential and commercial construction or civil engineering/infrastructure works since the period 2014-2017.



- Residential construction
- Non-residential construction
- Total construction
- Civil engineering / Major infrastructure



Construction pipeline (billions euros) based on Euroconstruct 2021 figures.



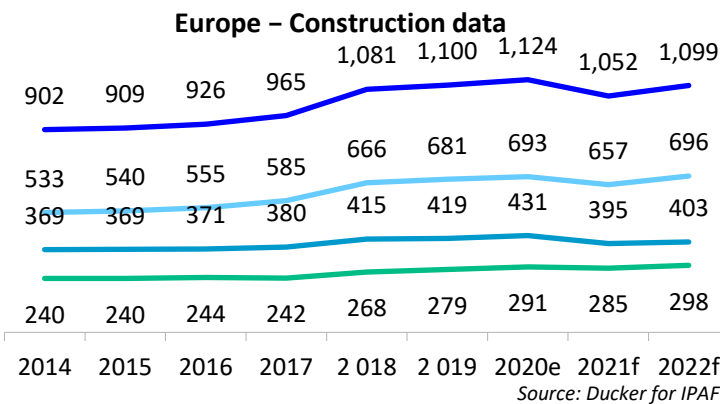
FINLAND GDP per Capita YoY % evolution

Source: FrontierView – Sept 2021.

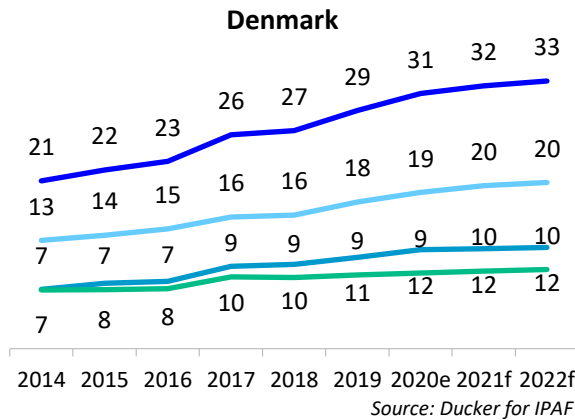
CAGR:Compound annual growth rate

Denmark – Construction statistics

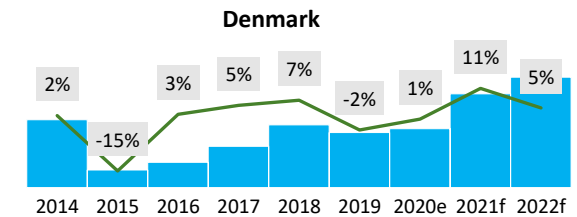
Denmark's construction sector has largely out-performed the wider European picture since about 2018, but sustained growth of around 1% per year from 2018 onwards is forecast to level off in 2022 and beyond.



- Residential construction
- Non-residential construction
- Total construction
- Civil engineering / Major infrastructure



Construction pipeline (billions euros) based on Euroconstruct 2021 figures.



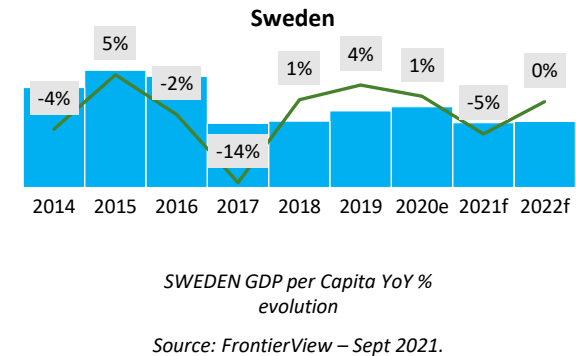
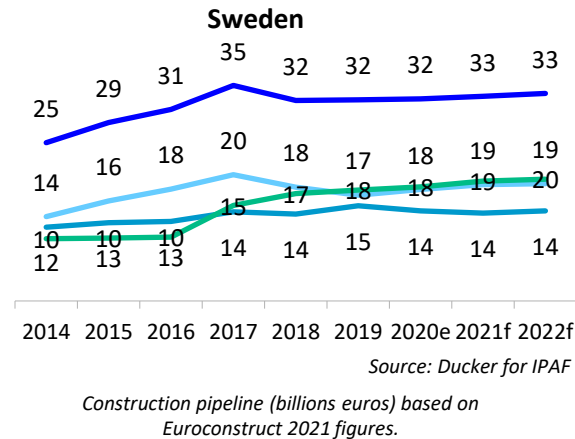
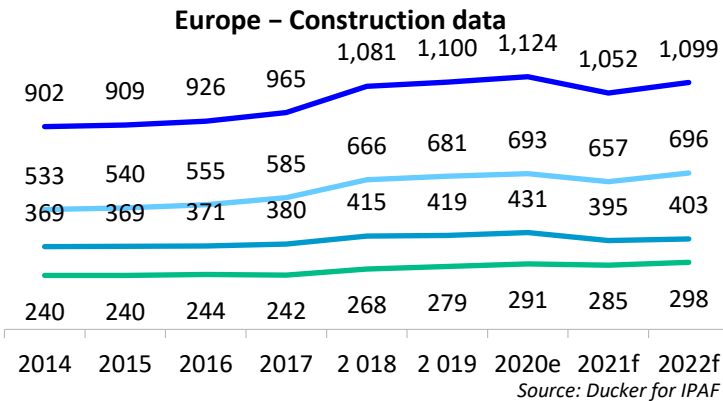
DENMARK GDP per Capita YoY % evolution

Source: FrontierView – Sept 2021.

CAGR: Compound annual growth rate

Sweden – Construction statistics

Since an appreciable spike in 2017, Sweden's construction GDP has not increased significantly in the past five years, seeing only very modest growth of around 0.5-1.5% year on year. Swedish activity was least affected by the pandemic.



- Residential construction
- Non-residential construction
- Total construction
- Civil engineering / Major infrastructure

CAGR: Compound annual growth rate



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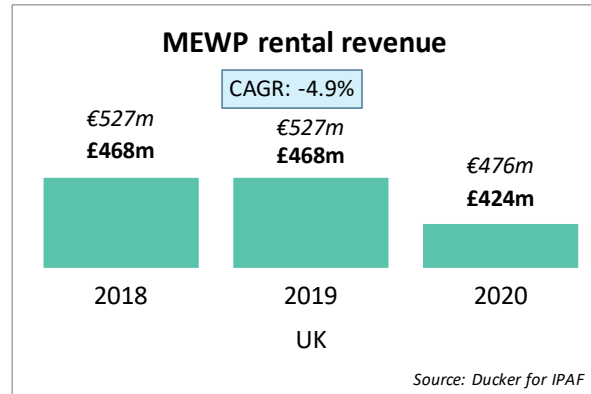
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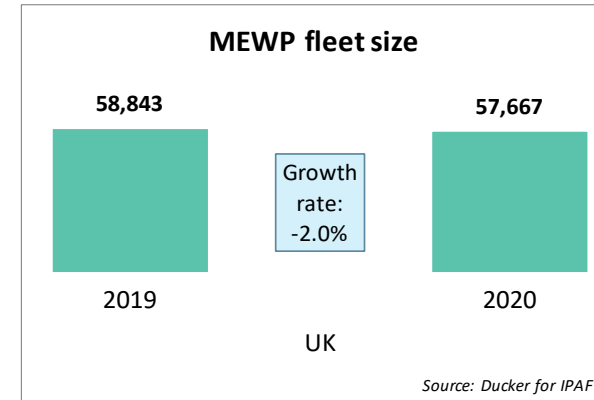
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United Kingdom – key findings

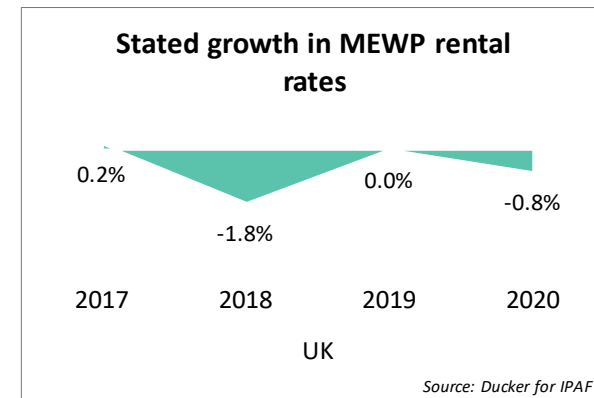
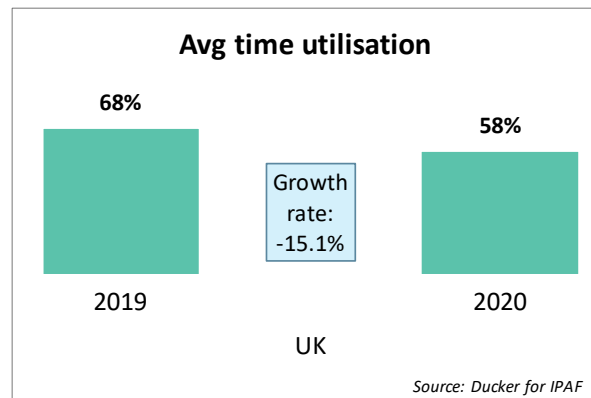
Utilisation rates fell by 15% across 2020, owing to the pandemic. This disruption caused overall rental revenue to fall by almost 5% and MEWP fleet size fall by 2% on the previous year.



CAGR: Compound annual growth rate

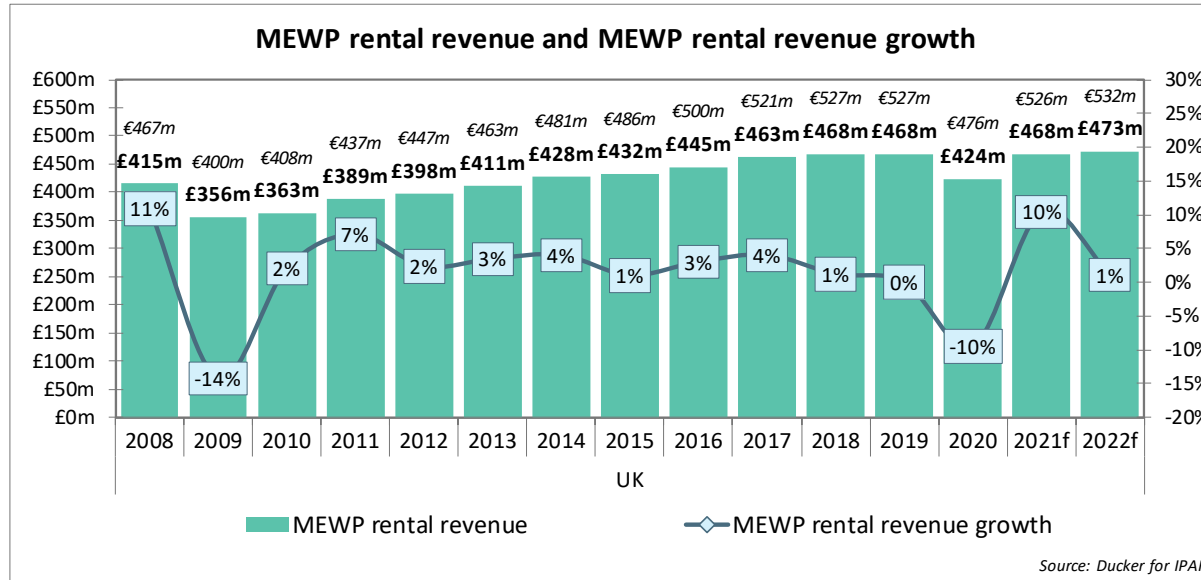


- All indicators of the UK market decreased significantly in 2020, owing mainly to the decline in economic activity caused by the COVID-19 pandemic, in particular during the country's first lockdown.
- Utilisation rates suffered a sharp decline between March and May of 2020, and though the rate recovered during the second half of the year, this had a severe impact on overall market performance.

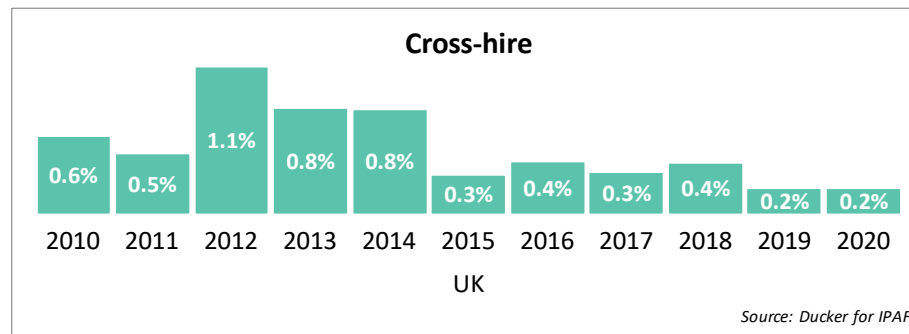


United Kingdom – rental market value and growth

The UK market was hit hard by the pandemic in 2020, but full recovery across most indicators is anticipated to be achieved by the end of 2021 – a much-improved outlook compared with that reported last year.



Exchange rate: £1 = €1.12

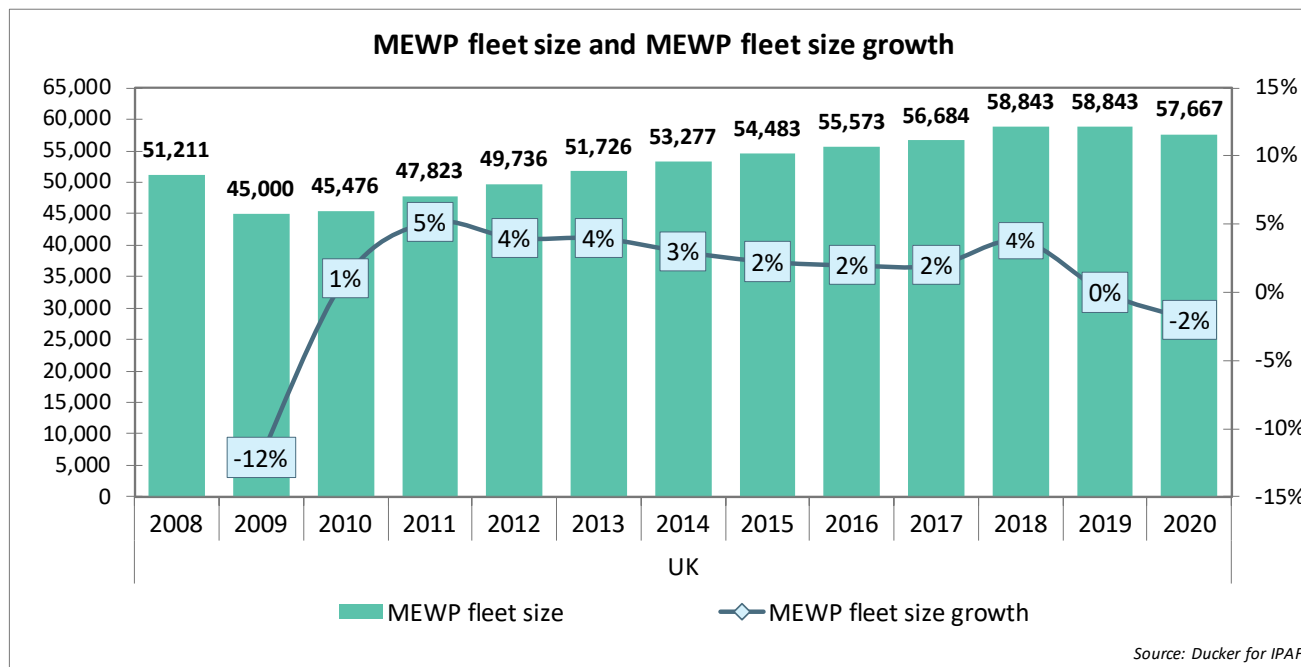


- Because operations in the construction sector did not come to a complete halt during the pandemic, the market is expected to recover by the second half of 2021.
- However, the market will only show modest growth not higher than 2% in the years after, it is predicted.
- Cross-hire rate has been on the decline for the past decade and was only at 0.2% in 2020.

United Kingdom – market size in units

The market has shrunk by 2% in volume in 2020, with the total fleet shrinking by more than a thousand MEWP units. There was a slight trend towards defleeting owing to the pandemic, in a bid to shore up utilisation and rental rates.

- The market size in units has dropped by 2% in 2020, falling to a total number of 57,667 MEWPs. This trend is mainly driven by cautious procurement and a slight trend towards defleeting by rental companies to improve utilisation.
- In 2021, the fleet size is increasing again, but might be hampered by manufacturers' increased lead times.

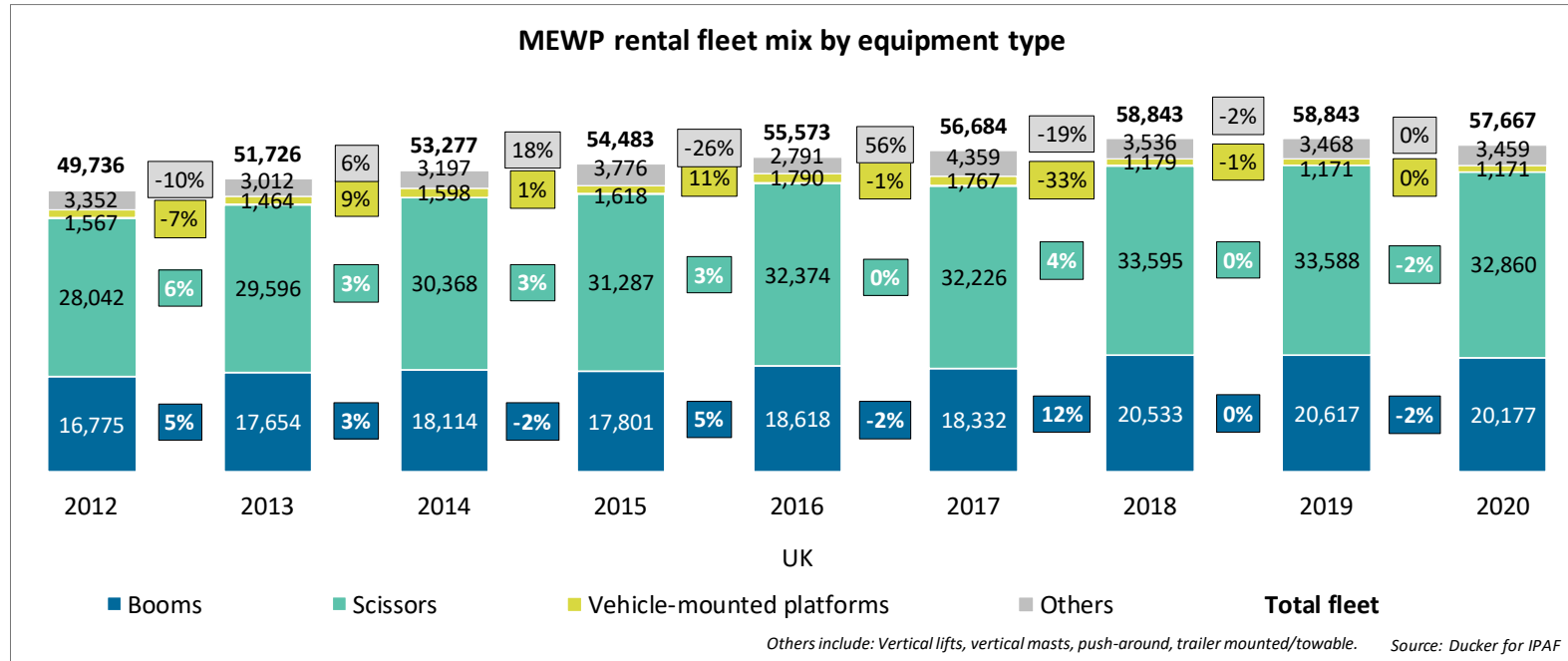


Included are powered access lifts: All booms, scissor lifts and vertical masts
Excluded: Low-level access equipment (<3m high), telescopic material handlers, forklifts, cranes, and MCWPs.

United Kingdom – market size in units

In 2020, the number of booms and scissors decreased by 2% in each category, leaving the overall mix of machine types in the total fleet relatively unchanged from the previous year.

- In 2020, the fleet mix was the same as in 2019, with both booms and scissors fleet shrinking by 2%. The number of vehicle-mounted platforms remained unchanged.



Included are powered access lifts: All booms, scissor lifts and vertical masts
Excluded: Low-level access equipment (<3m high), telescopic material handlers, forklifts, cranes, and MCWPs.

+X%

% unit growth, eg both scissors and booms fleet increased by 7% from 2017 to 2018.

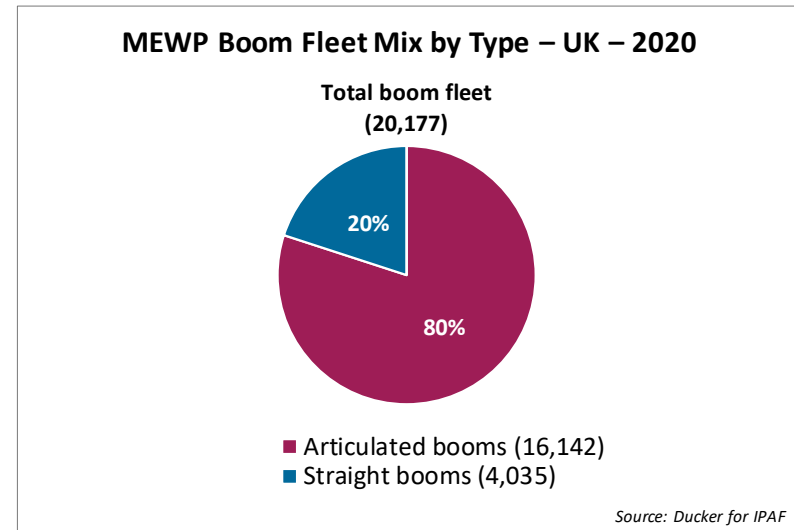
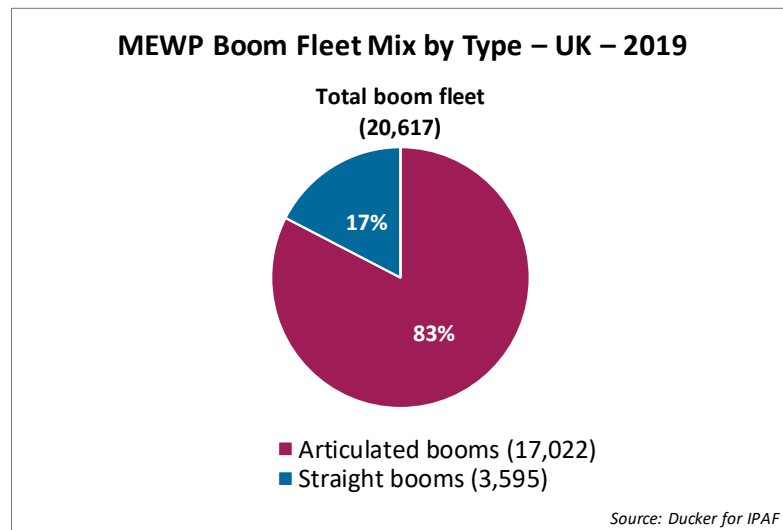
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“We are seeing a growing interest in mounted platforms, but in 2020 we were decreasing in general, so there aren’t any increase in any types of machines.” – MEWP rental company manager

United Kingdom – market size in units

Articulated booms are still the predominant type of boom in the UK market, making up 80% of the total fleet, there has been a slight increase in the proportion of straight booms in 2020, up to 20% from 17% in 2019.

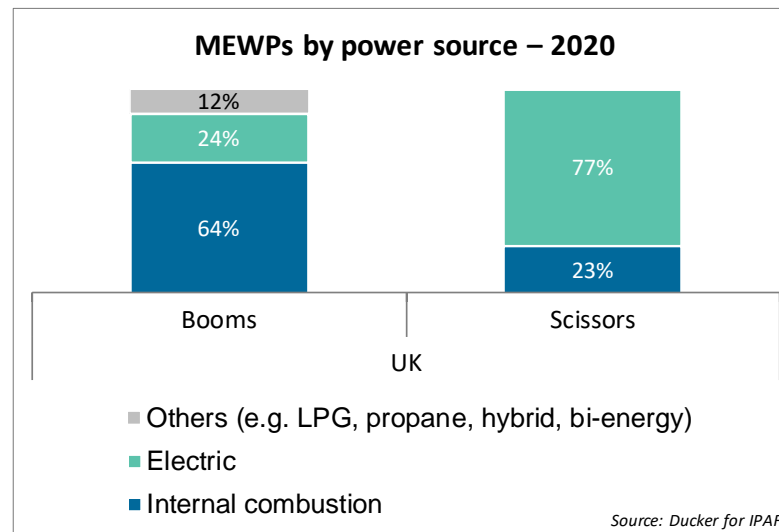
- In 2020, the overall UK fleet of booms was at 20 177 units
- Straight booms increased slightly, meaning the share of articulated booms fell to 80% from 83% in 2019.



United Kingdom – power sources

There remains a stark difference in the type of power source depending on machine type in the UK, with just 24% of booms typically being electric, while 77% of scissors units are electric-powered.

- Mix of power sources in the UK fleet was pretty much unchanged between 2019 and 2020.
- Penetration of electric booms is currently at 24% and is expected to reach 30% within the next three years, driven by a common trend towards greater energy-efficiency and reducing carbon emissions.
- Contingent upon the availability of new machines capable of matching the performance of the largest and most powerful internal-combustion powered MEWPs, the share of electric or hybrid engines is anticipated to increase substantially over the next few years as older machines are replaced with newer, cleaner MEWPs.
- The red diesel tax rebate in the UK ends in April 2022, intended to reduce the construction industry's reliance on diesel. This is expected to accelerate the trend towards electrification, but increased costs might curb investment



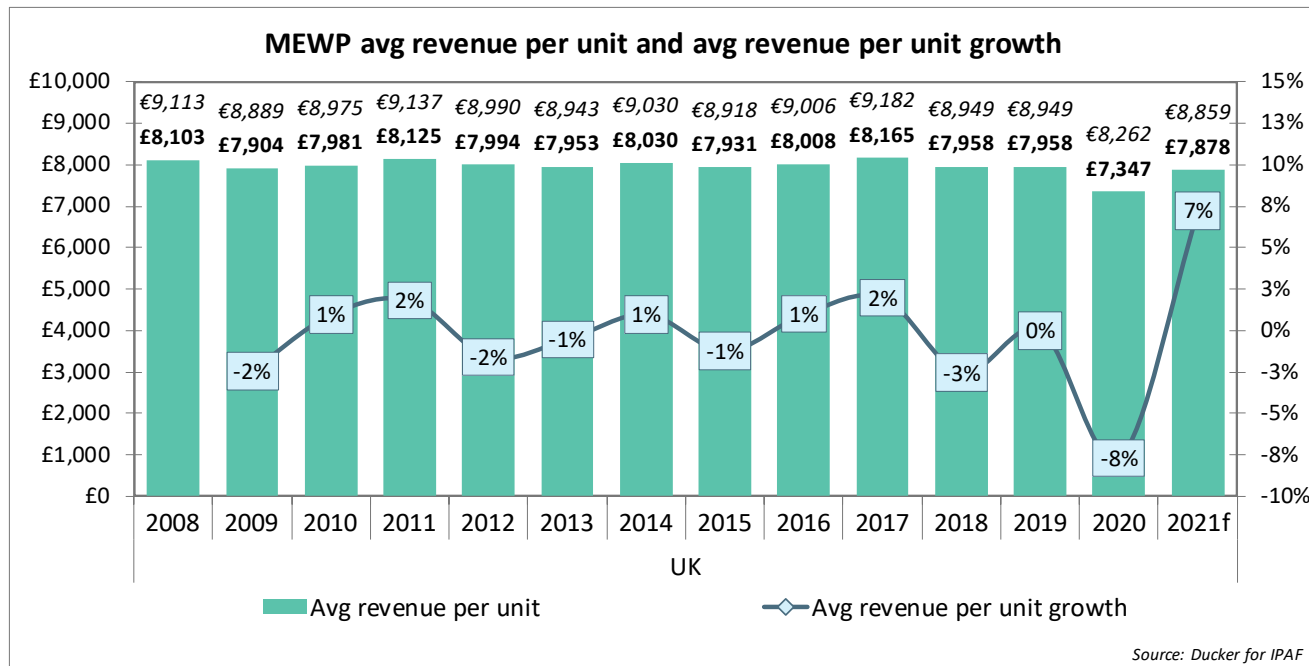
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“There will be increasing pressure for electric & hybrid machines driven by pressure to reduce emissions and reduce noise levels.” – MEWP rental company manager

United Kingdom – revenue per unit

Average MEWP rental revenue per unit was £7,347 in 2020, down significantly on 2019, when the figure stood at just under £8,000 per unit. Average revenue is expected to recover in 2021 to just under £7,900 per unit.

- Average revenue per unit fell by 8% in 2020 to £ 7,347, driven down by the decrease in utilisation rate.
- Turnover is expected to recover, but average revenue per unit is not expected to regain pre-pandemic levels in 2021, due to the ongoing downward pressure on rental rates.

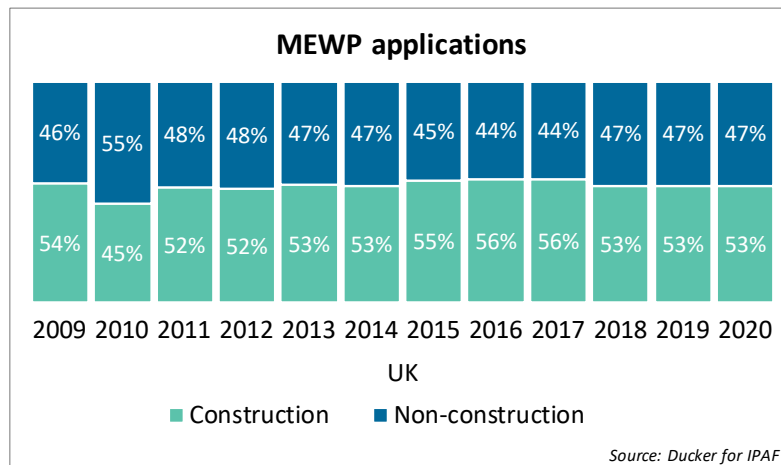


Included are powered access lifts: all booms, scissor lifts and vertical masts
Excluded: low-level access equipment (<3m high), telescopic material handlers, forklifts, cranes and MCWPs.

United Kingdom – applications

The make-up of end-use applications has changed little over the past few years, with just over half of UK revenue generated in the construction sector. Construction suffered less than most non-construction sectors from the pandemic.

- The split between construction and non-construction applications remained the same as in previous years with just over half (53%) of rental revenue coming from the construction sector.
- While most non-construction end-sectors were hit harder than construction by the pandemic, storage and logistics grew considerably, driven by the rise of online sales and e-commerce.

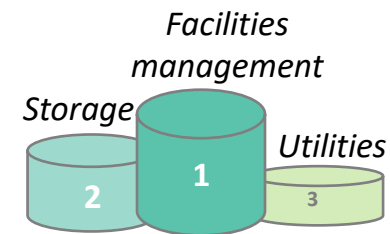


Share of rental revenue:

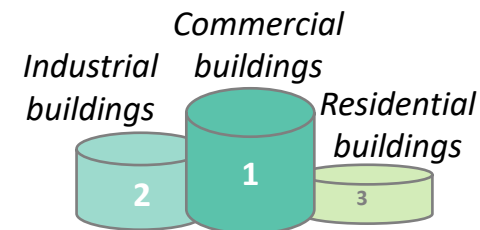
Non-construction includes industry, maintenance, cleaning, utilities, events.
Construction includes new-build and renovation; including residential, commercial, retail and industrial.



Main non-construction sub-sectors



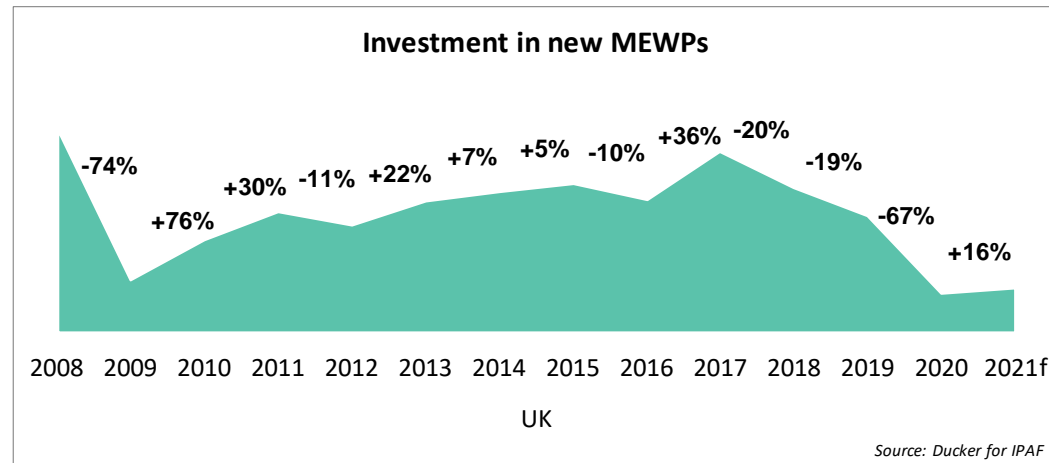
Main construction sub-sectors



United Kingdom – investment

The pandemic caused a sharp drop in investment in 2020, which is expected to recover but not return to pre-pandemic levels before 2022 at the earliest.

- Investment declined by 67% in 2020 for two main reasons: Rental companies showed caution in investment policies, owing to the uncertain economic environment; rental companies also did not expand or invest in new machines, except for some renewal of the oldest, least-reliable and cost-effective equipment.
- A moderate investment recovery is expected for 2021, but not at the levels of 2019



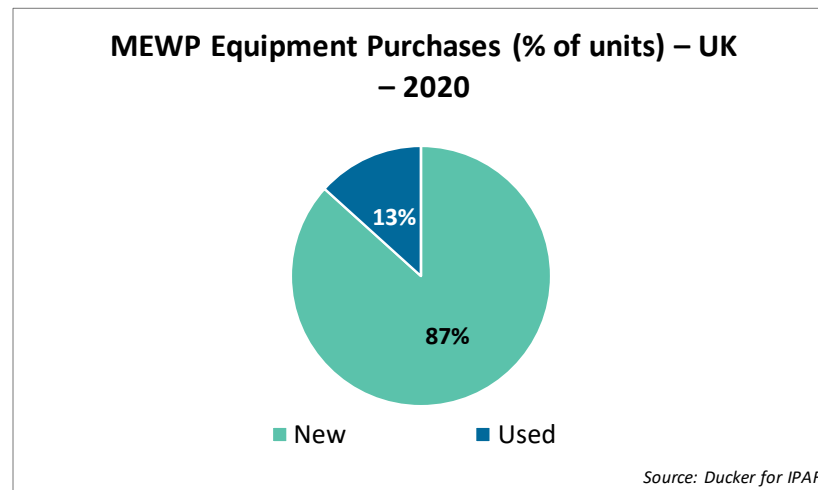
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“We couldn’t continue with the investment plan we had for 2020 and needed to cancel several orders of new machines.” – MEWP rental company investment planner

United Kingdom – equipment purchases

The majority of units purchased in 2020 were new machines direct from the manufacturer, though a more cautious investment approach and a number of companies looking to divest units or defleet did boost the used market.

- 87% of the MEWPs purchased in the UK in 2020 were new machines direct from the manufacturer.
- 13% of the MEWPs purchased in the UK in 2020 were used machines, which represents a 5% increase compared to 2019.



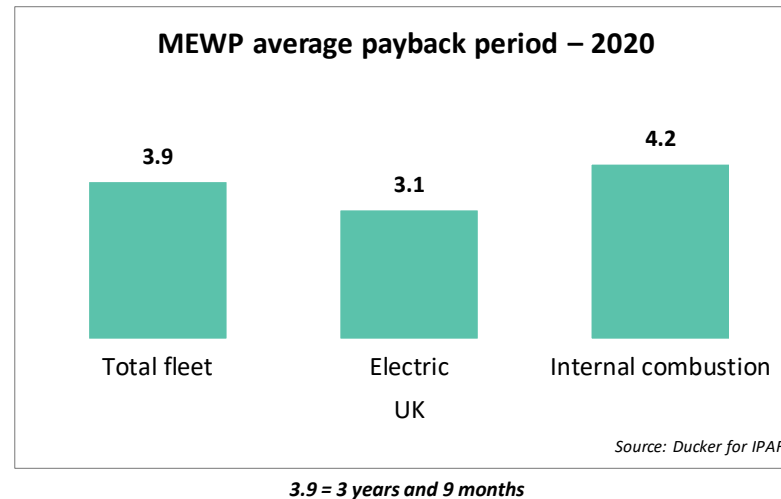
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“The used equipment market recovered in 2020 after being very slow during the start of the pandemic but has shown positive signs in terms of both volume and pricing” – MEWP rental company purchasing manager

United Kingdom – typical payback period

Electric MEWPs on average offer a shorter payback period, owing to higher average rental rates and a slightly better utilisation rate than combustion-engine-powered units, which cannot be used indoors or in ULEZ areas.

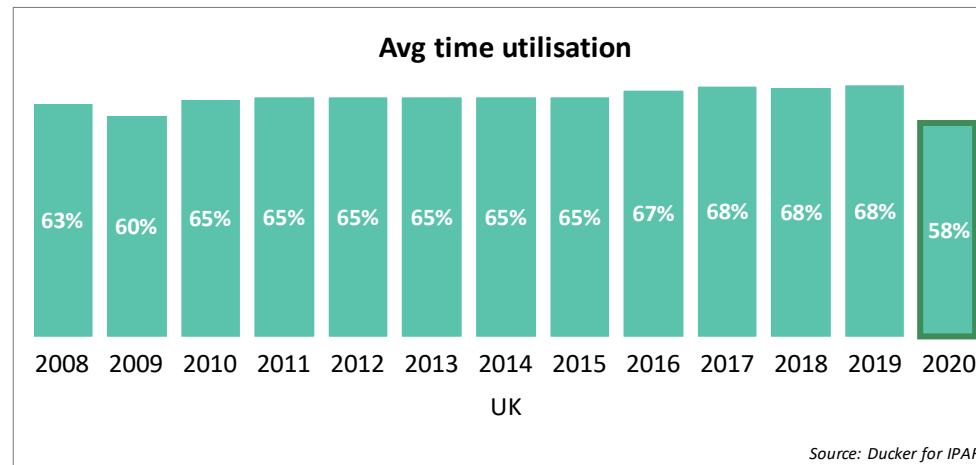
- The typical payback period for the electric MEWP is three years and one month, and the payback for internal combustion-engined MEWPs is longer, at four years and two months on average.
- The main reasons for the faster payback of the electric machines are the increased rental rates for this type of MEWP, and also slightly higher average utilisation rate owing to increased versatility.
- These factors tend to offset the initial higher purchasing cost, which is typically 5-10% greater on average.



United Kingdom – utilisation rate

The overall utilisation rate in 2020 fell to 58% but a quick recovery is anticipated in 2021. Demand bounced back strongly since a steep drop in Q2 2020 and could outstrip demand from 2019 as the pipeline backlog is addressed.

- The pandemic had a predictably negative effect on utilisation rates in the UK, with a drop by 10% in 2020. However, as the construction industry continued operations once new Covid-safety measures were implemented, the downward trend was largely limited to the second quarter of 2020.
- Higher utilisation rates than pre-pandemic levels are expected in 2021, as fleet size remains relatively stable but demand returns to and possibly exceeds pre-pandemic levels.



Definition: Physical number of machines out on hire as % of total number in fleet at any given time.

Scissors:
58%

Booms: 59%

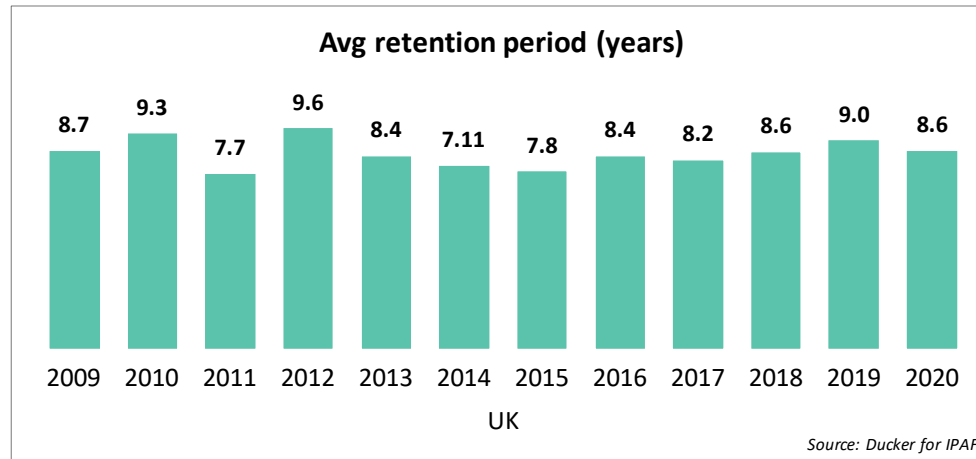
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“Utilisation rates fell to very low levels in April & May 2020 and have recovered since with strong demand.”
– MEWP rental company manager

United Kingdom – retention period

The average retention period of MEWP machines was not significantly impacted by the pandemic. Most rental companies that did defleet opted not to renew just the oldest machines that were due to be jettisoned anyway.

- The average retention period was eight years and six months in 2020, pretty much in line with the figure over the past five years, although down very slightly on 2019.



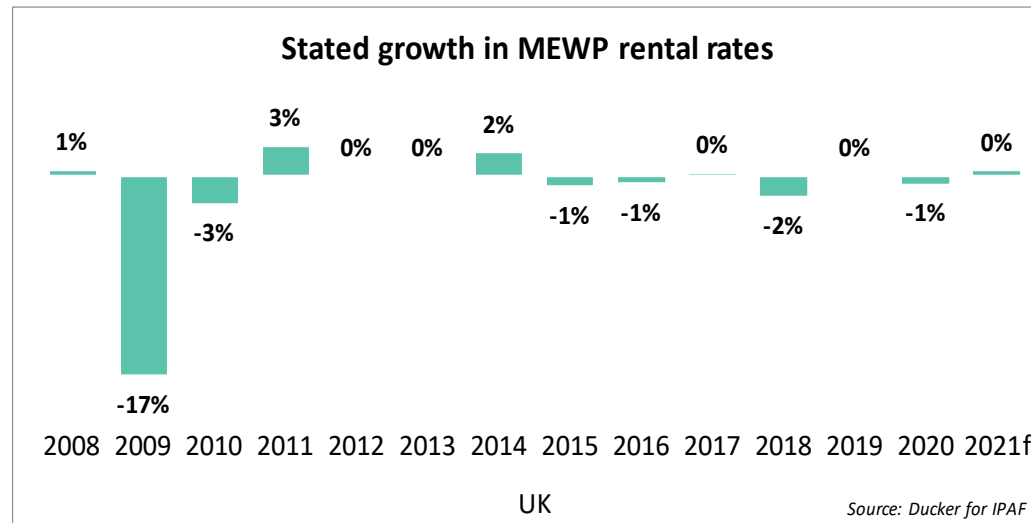
8,6 = 8 years and 6 months

Definition: Period of time that a machine is kept in fleet = selling age if acquired new

United Kingdom – rental rates

Although rental companies were expecting an overall rental rate decrease in 2020, it stayed relatively stable. Over the course of the year as a whole, the fall seen in Q2 was offset by demand rebounding well in Q3 and Q4.

- Downward price pressure in the market was lower than expected and rental rates remained relatively stable across 2020 as a whole
- Rental rates began rising in early 2021, but this trend is fragile and will be dependent on rental companies' pricing strategy.



“Prices held surprisingly well, it was more a question of availability and being able to deploy the machines using Covid-safe practices.” – MEWP rental company manager



A PERSPECTIVE FROM THE EDITOR OF
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Report 2021 – *UNITED KINGDOM*

- The UK experienced a major drop in general rental during 2020, due to lockdowns and long-standing restrictions through the year, but it has come back strongly this year and in many cases companies are returning to pre-Covid levels.
- However, the UK's recovery is being hindered by a series of challenges brought about by supply chain delays, a situation experienced across the world, and issues linked to the pandemic and Brexit, such as a shortage of lorry drivers, hampering the deliveries of a wide range of goods and disrupting just-in-time logistics.
- One of the effects of longer lead times for equipment is that rental companies have been holding on to their MEWPs for longer and increasing the average age of their fleets. On the flip side, it means prices of used equipment are at a higher level, with sellers often being able to ask any price they like. This, of course, is not a situation exclusive to the UK, but as one of the world's largest markets, and as it navigates life outside the EU, the situation is felt as strongly in the UK as anywhere.
- Looking at the UK market specifically, the European Rental Association (ERA), in its most recent update, states there were falls in rental activity in the UK during 2020, amounting to a 16% drop over the year. The association goes on to point out, however, that countries which fared worst last year are seeing the biggest recoveries this year, with the UK expected to rebound by 5.5% during 2021, along with Spain, up 5.5%, Italy up 6.5% and France up 9.5%.

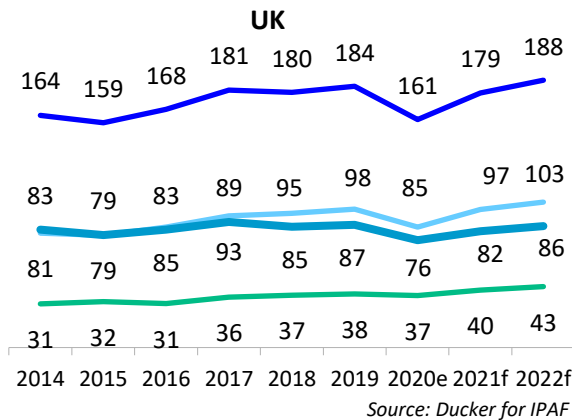
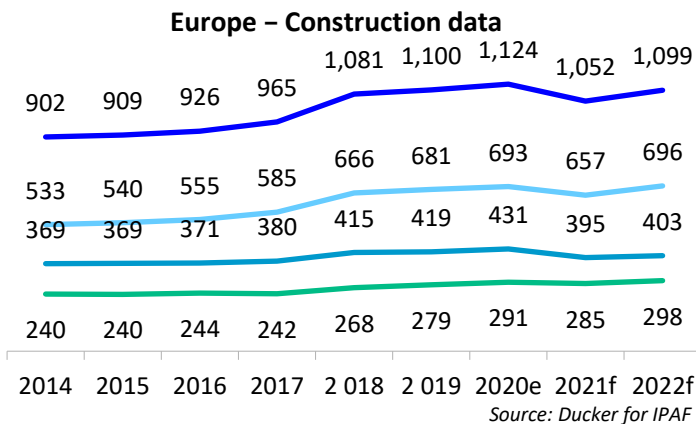
- Major UK rental company Speedy supports the ERA's findings in its latest financial report. The company says market conditions remained favourable through the second quarter of 2021. Its rental revenue for the three months was approximately 3% ahead of the same period in 2020, and Speedy adds it has a strong balance sheet and renewed banking facility, giving it substantial headroom for growth.
- Sunbelt UK, part of the Ashtead group, which incorporates Sunbelt in North America, generated rental revenue of £99 million for its most recent quarter, ending 31 June, representing a rise of 24% on the first quarter last year. While the business says it continues to benefit from the work carried out for the UK Department of Health in its Covid-19 response efforts, the core business is performing strongly. And in the quarter, Sunbelt UK's general tool business grew 14%, from depressed activity levels last year; its specialty businesses grew throughout 2020 and by 22% in the first quarter of 2021.
- On the subject of specialists, those companies providing equipment to essential services, including the health sector, maintenance, utilities and, for example, tree care and landscape management, remained strong throughout the pandemic. This includes the manufacturers of the relevant equipment, such as van and pick mounts, spider lifts and truck mounts, all of which are long established products in the UK market.
- Another example of expanding opportunities in the UK comes from its film and TV industry, which specialist rental company Media Access Solutions (MAS) says is on the crest of a wave. No fewer than ten studios are being built in and around London, while a studio complex is being developed in Liverpool, and the Northern Ireland industry having trebled over the past decade.



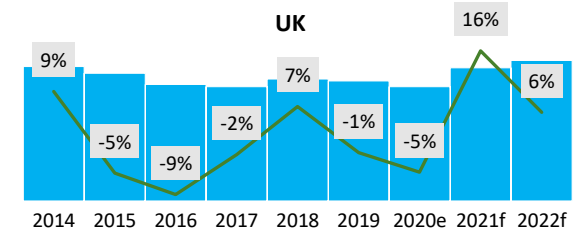
APPENDIX
IPAF Powered Access Rental Market
Report 2021 – *UK*

United Kingdom – construction statistics

The UK overall market fell year-on-year in 2020, but the construction sector stayed relatively stable. A certain amount of pent-up activity has sustained the market over the year and into 2021, reversing any fall in Q2 2020.



Construction pipeline (billions euros) based on Euroconstruct 2021 figures.



UK GDP per Capita YoY % evolution
Source : FrontierView – Sept 2021.

- Residential construction
- Non-residential construction
- Total construction
- Civil engineering / Major infrastructure

CAGR: Compound annual growth rate



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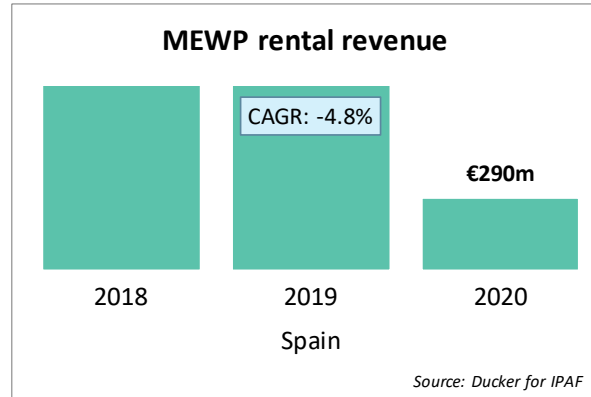


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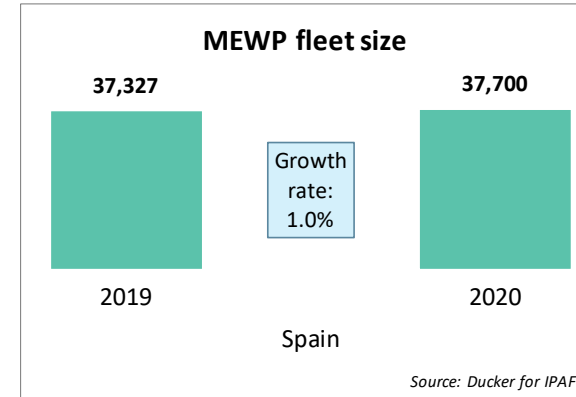
IPAF has been working with Ducker to create these exclusive industry reports since 2009

Spain – key findings

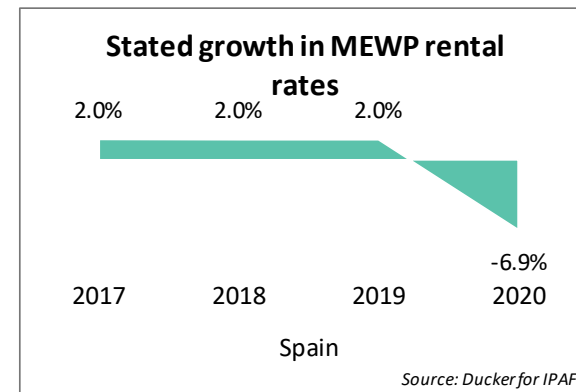
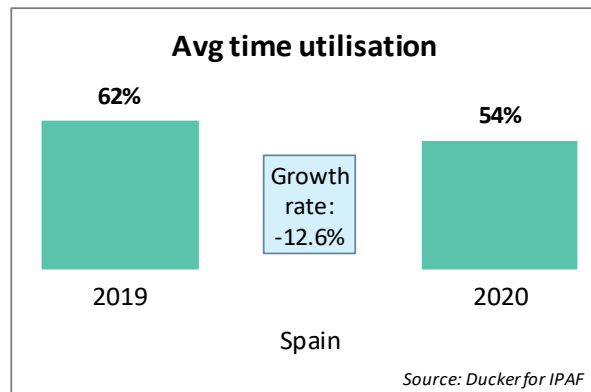
Like most countries under study, Spanish MEWP rental revenue dropped very significantly in 2020, driven by a fall in both utilisation and rental rates during the peaks of the pandemic. Recovery in 2021 has been better than predicted.



CAGR: Compound annual growth rate

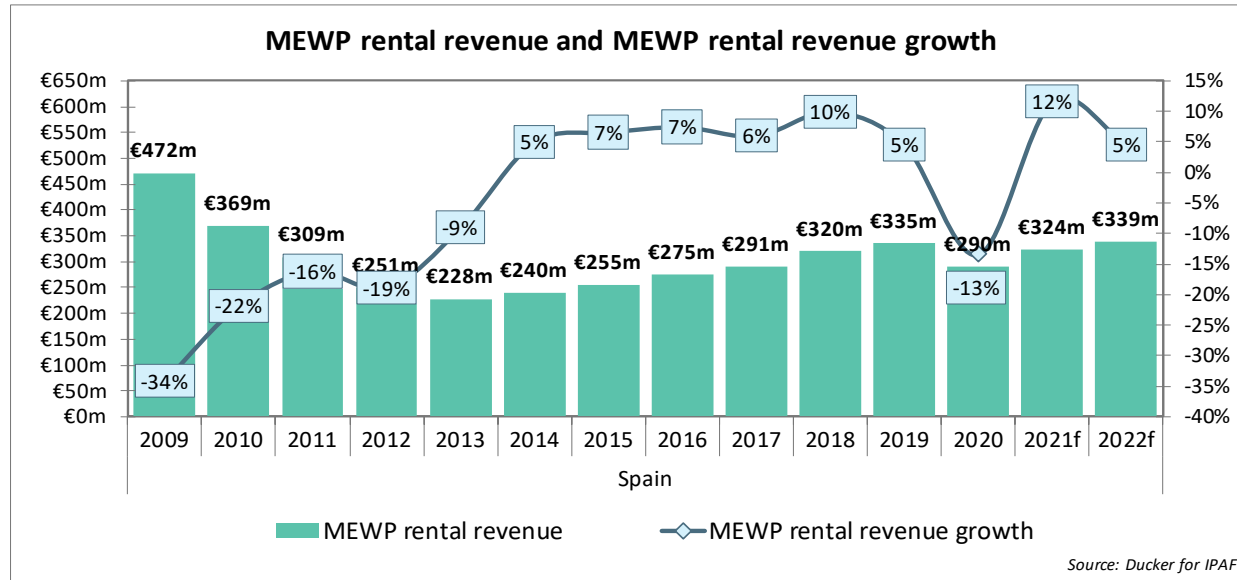


- MEWP rental revenue decreased by 13% between 2019 and 2020, owing to the pandemic and several national lockdowns that occurred during the year.
- Fleet size kept growing slightly, as rental companies had been investing at the beginning of 2020 before the pandemic struck, and most anticipated that activity would return pretty much to normal in 2021.

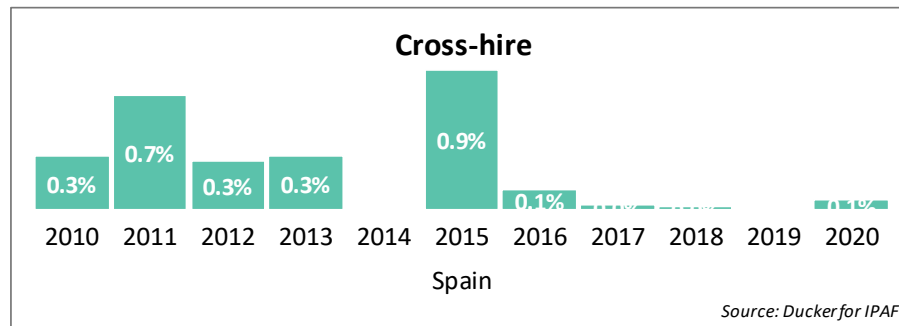


Spain – rental market value and growth

The MEWP rental market in Spain shrank by 13% in 2020 as a whole, and should recover at least partially in 2021, with a return to 2019 levels anticipated at some point during 2022.



Note: Revenue and fleet data have been revised through comparison with previous years

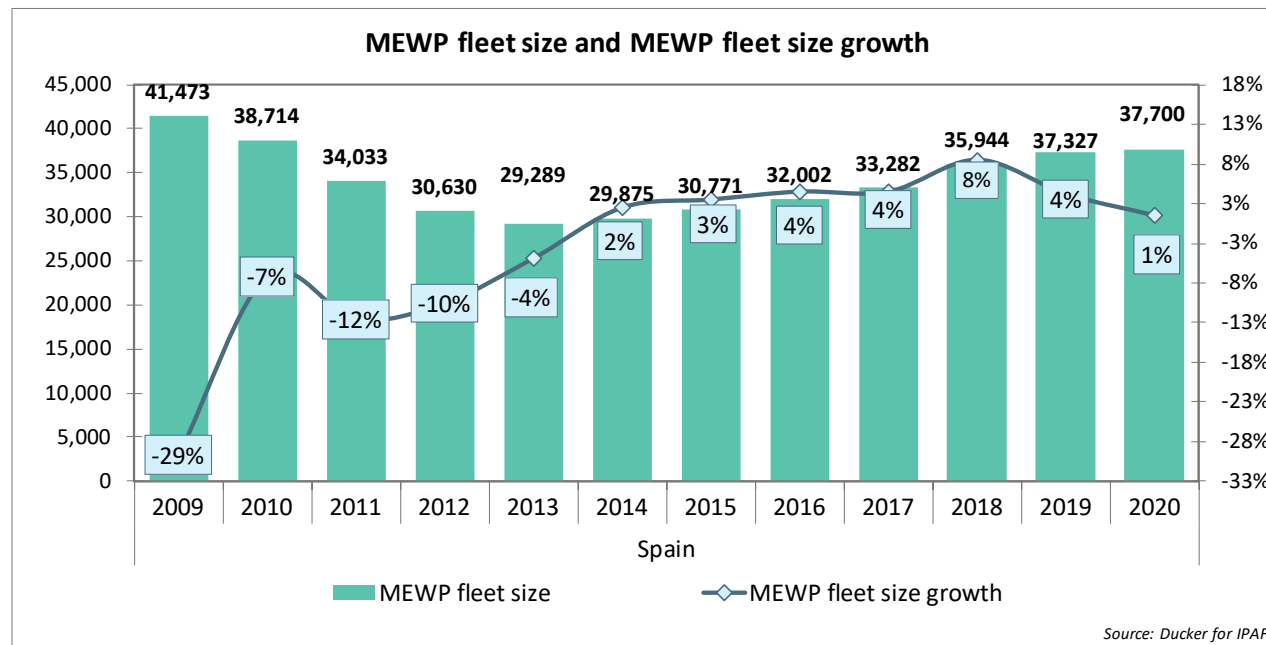


- Revenue fell below €300m, owing mainly to the pandemic and the swift and strict halt to most non-essential activity in the country in 2020.
- Rental companies are much more optimistic about their 2021 forecast, but revenue is not yet likely to return to or exceed 2019.
- Cross-hire is almost non-existent in Spain, and this is not expected to change in the coming years.

Spain – market size in units

Spanish rental companies decided to keep hold of their fleets despite the pandemic, and some of the investment from the first quarter were maintained, as many rental companies were confident the industry would bounce back.

- Overall fleet size increased slightly in 2020, by 1%. It is due to the optimism of rental companies in 2019, who were expecting a growth for 2020. Even though the pandemic occurred, some of the investments were already made, and there was no defleeting movement in the country.
- In 2021, investment is expected to grow again, rental companies will expand their fleet for a total augmentation ranging between 2 to 3%.



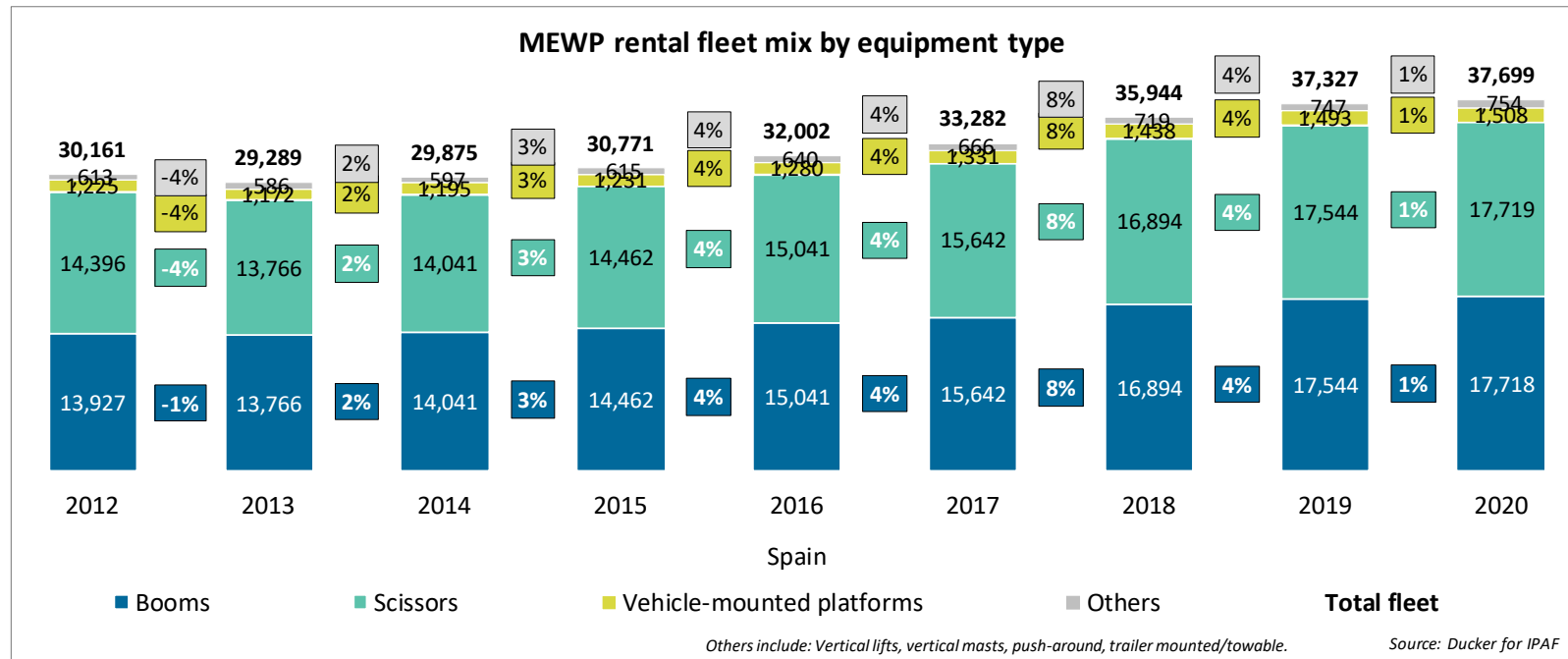
Included are powered access lifts: All booms, scissor lifts and vertical masts
Excluded: Low-level access equipment (<3m high), telescopic material handlers, forklifts, cranes, and MCWPs.

Revenue and fleet data have been revised through comparison with previous years.

Spain – market size in units

Many Spanish rental companies did grow their fleet slightly, but there was no significant overall change to typical fleet mix. All the different MEWP categories grew similarly in 2020, increasing by around 1% per category.

- In 2020, the typical equipment mix remained unchanged compared to 2019. The main type of machines in Spain's total MEWP rental fleet are booms and scissor, accounting for just under 18,000 machines each.
- In 2021, this slight expansion trend will continue, with a fleet size that will grow consistently across every category.



Included are powered access lifts: All booms, scissor lifts and vertical masts
Excluded: Low-level access equipment (<3m high), telescopic material handlers, forklifts, cranes, and MCWPs.

+X% % unit growth, eg both scissors and booms fleet increased by 7% from 2017 to 2018.

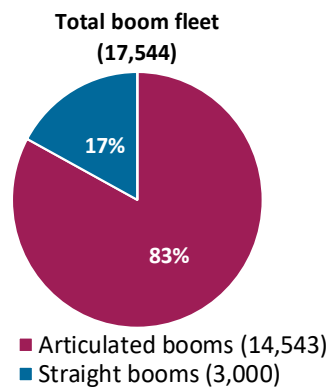
Revenue and fleet data have been revised through comparison with previous years. Only vehicle-mounted platforms held by rental companies owning self-propelled fleets are included in scope

Spain – market size in units

The Spanish MEWP rental market tends to favour articulated booms over straight booms, and this remained unchanged across 2020 as a whole.

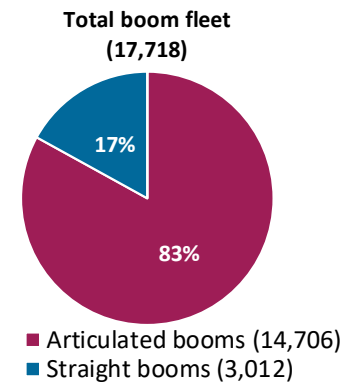
- In 2020, as in 2019, articulated booms represented 83% of the overall boom fleet, amounting to 14,706 machines.
- In 2021, this is likely to remain the same, as rental companies tend to rely more on articulated booms, favoured by clients for their greater versatility and wide range of uses in infrastructure, construction, facilities management and maintenance across a broad array of tasks.

MEWP Boom Fleet Mix by Type – Spain – 2019



Source: Ducker for IPAF

MEWP Boom Fleet Mix by Type – Spain – 2020

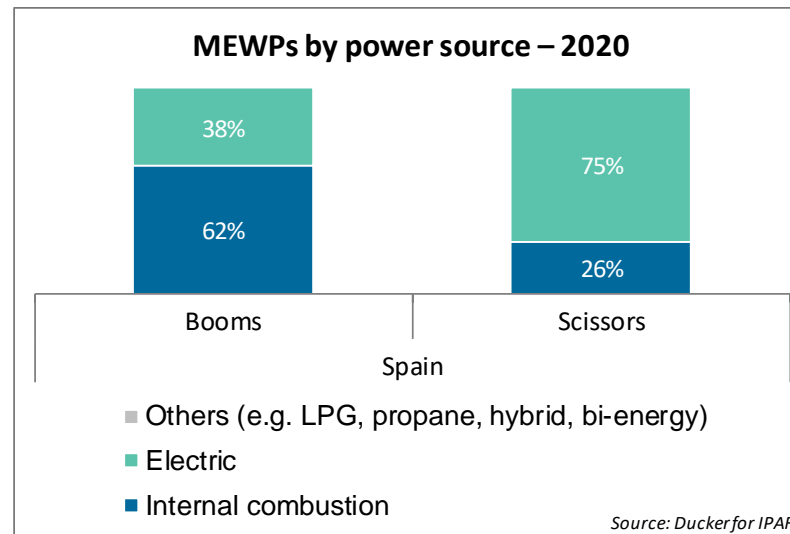


Source: Ducker for IPAF

Spain – power sources

The electrification trend continues, similar to that in most of if not all the other European countries under study. Most key rental market players are committed to switching to cleaner power sources in their fleet in the years to come.

- In 2020, electric-powered machines represented 38% of the boom fleet and 75% of scissors. Most if not all booms above 20m high are still diesel-powered, but the trend to electrification applies for all equipment below that height.
- Some of the biggest companies in the country have decided that the green transition will be a priority over the next few years, which will lead to an incrementally increasing pace of transition in 2021 and beyond.
- In Spain, electric-powered machines are often more profitable than diesel ones, which continues to push many rental companies to keep investing to transition towards green energy sources.



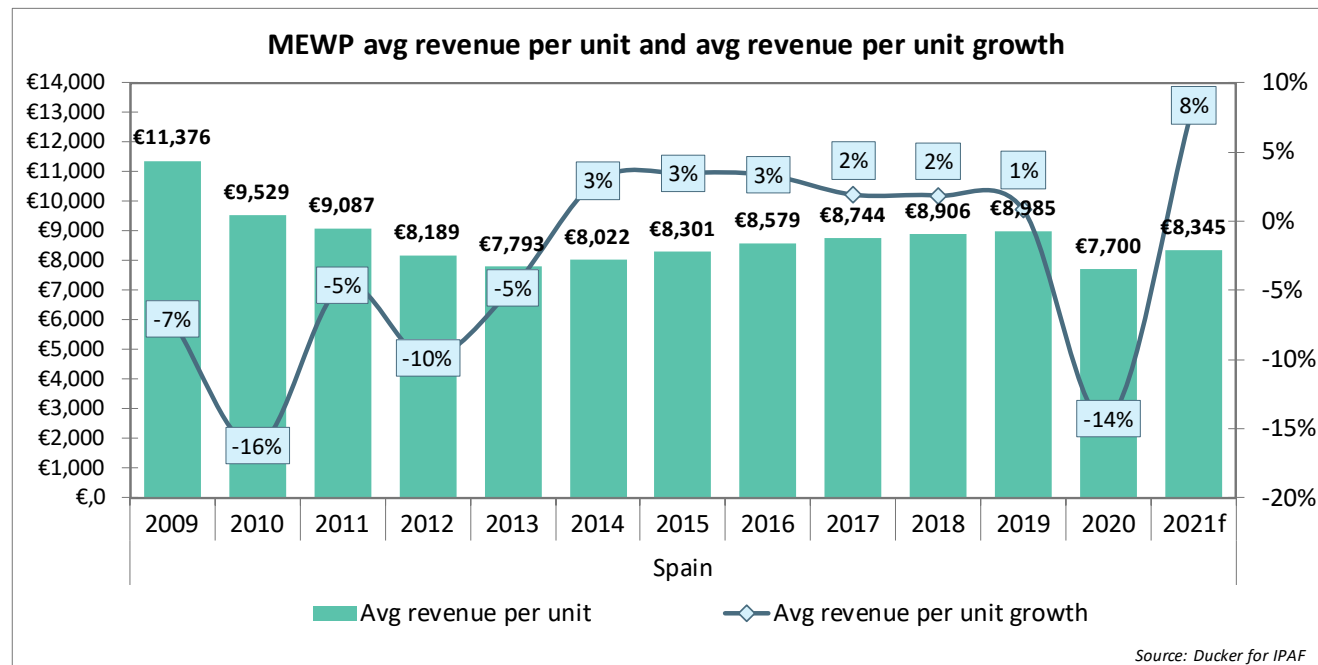
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“The reason for more electric-powered machines is due to strategy, as the profitability of electric scissors is greater than diesel ones in Spain.” – MEWP rental company manager

Spain – revenue per unit

Average revenue per unit dropped significantly in 2020. Though it is expected to bounce back in 2021, it is not expected to reach 2019 levels before some time in 2022.

- Owing to a growing fleet size and major falls in utilisation and rental rates, the average revenue per unit fell by around 14 percentage points in 2020.
- In 2021, revenue is expected to grow significantly compared to 2020, but fleet size growth and depressed rental rates won't create the ideal conditions for average revenue per unit to return to or surpass pre-pandemic levels.



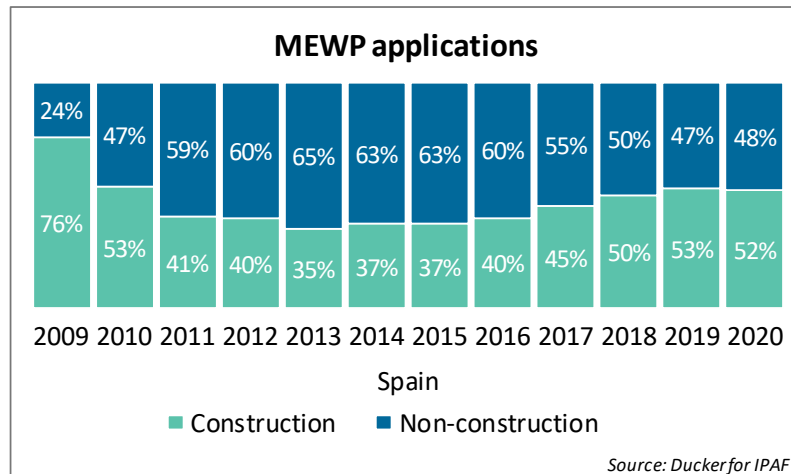
Included are powered access lifts: all booms, scissor lifts and vertical masts
Excluded: low-level access equipment (<3m high), telescopic material handlers, forklifts, cranes and MCWPs.

Revenue and fleet data have been revised through comparison with previous years, and only vehicle-mounted platforms held by rental companies owning self-propelled fleets are included in scope.

Spain – applications

The division between construction and non-construction end uses changed slightly between 2019 and 2020, with some non-construction sectors such as logistics growing while others were shut down completely during 2020.

- Both construction and non-construction sectors were hit by the pandemic and lockdowns in Spain during 2020, but some sub-sectors such as logistics and supply chains are growing rapidly.
- Activity in construction is growing again in 2021, and the split is likely to swing back to what it was in 2019.
- With the pandemic, residential and commercial building account for a lesser portion of overall construction activity: Industrial, utilities and infrastructure accounted for the greater share of 2020 construction output.



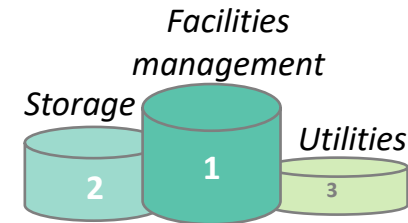
Share of rental revenues

Non-construction includes industry, maintenance, cleaning, utilities, events.

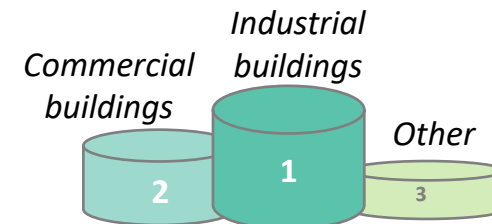
Construction includes new-build and renovation; including residential, commercial, retail and industrial.



Main non-construction sub-sectors



Main construction sub-sectors



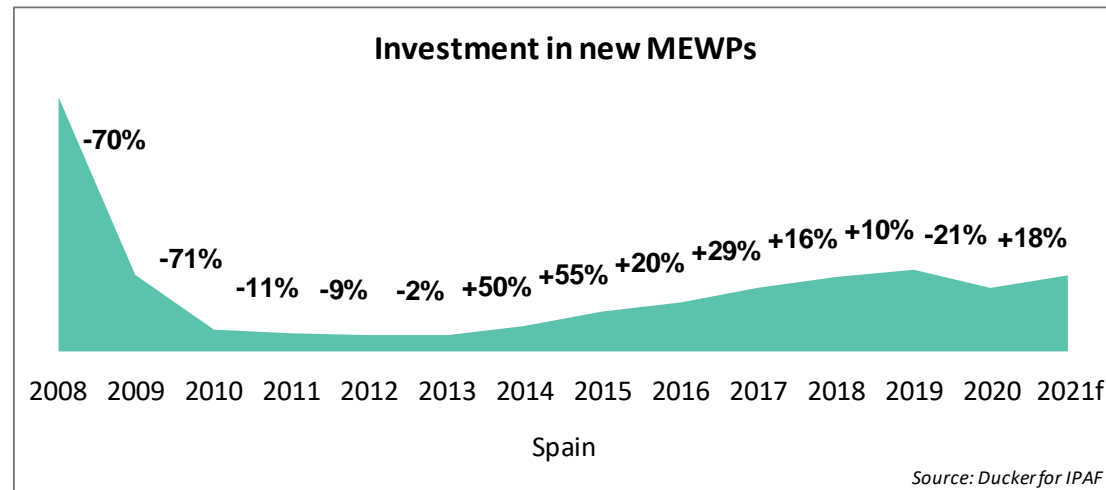
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“Thanks to e-commerce, automated warehouses, and last-mile delivery depots, logistics has really been growing and now takes more than half of the business.” – MEWP rental company manager

Spain – investment

Investment fell by 21% in 2020, owing in the most part to the pandemic and associated economic uncertainty, but some companies did press ahead with a substantial part of their investment strategy, betting on a rapid rebound.

- In 2020, investment dropped by 21% compared to 2019, though some investment was sustained despite the pandemic. Rental companies stuck with normal fleet renewal, and some even chose to expand their fleet slightly.
- Investment is growing again in 2021, as rental companies buy new machines, and continue the ongoing transition towards cleaner, greener fuel sources.



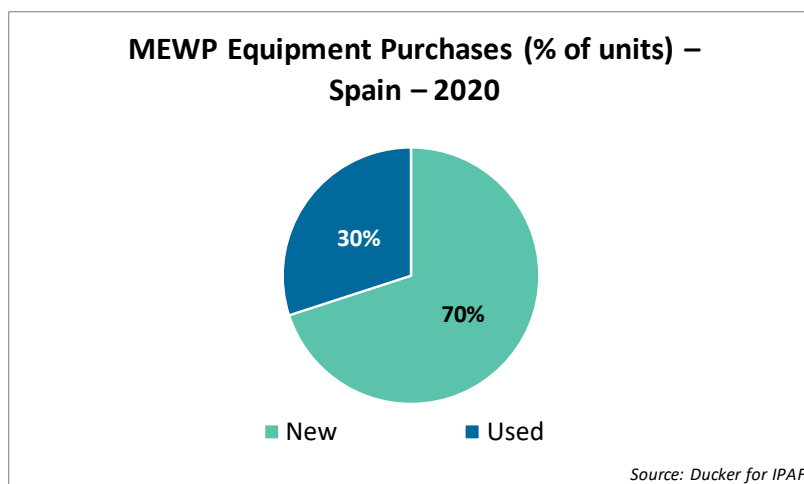
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“We opted for a full fleet renovation process in 2021, adding more electric machines, and replacing many of our older equipment types with new, green replacements.” – MEWP rental company investment strategist.

Spain – equipment purchases

In 2020, purchases of used equipment remained similar to 2019. Spain has a relatively high proportion of used equipment purchases compared to many of the other European countries, and the split is likely to remain at 70:30.

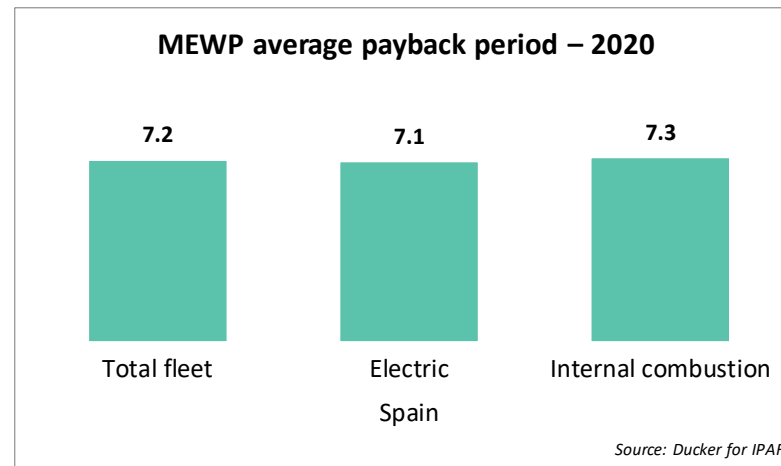
- Even through the pandemic, the split between new and used machines remained the same in 2020 as in previous years, at around 70% new v 30% second-hand. Apart from investment at the beginning of the year, most rental companies did not try to expand their fleet as utilisation rates fell.



Spain – typical payback period

The average payback period in 2020 was 7.2 years, being one of the countries under study with the longest ROI, due to comparatively low rental rates.

- The average payback period was impacted by the drop in rental rates. As a result, payback period increased for both electric and internal combustion equipment, from around seven years in 2019 to seven years and two months in 2020.

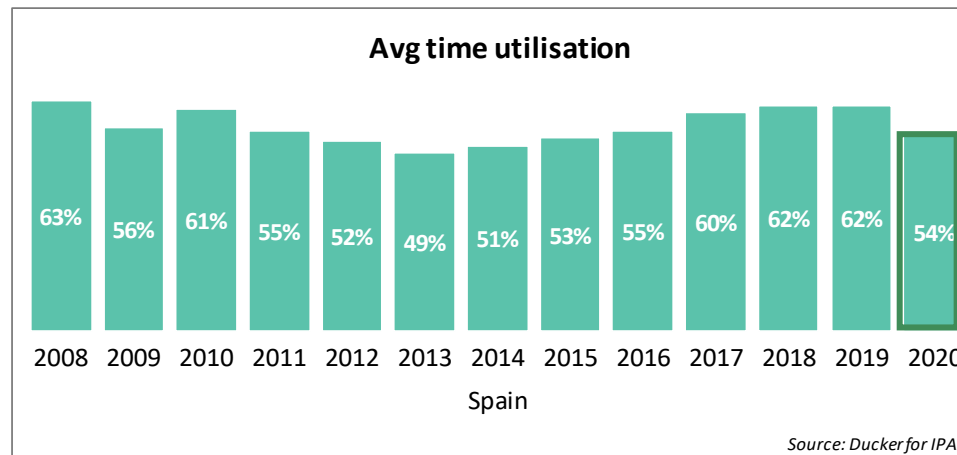


7.2 = 7 years and 4 months

Spain – utilisation rates

Utilisation rate fell by 8% between 2019 and 2020, to stand at 54% at the end of 2020. There is optimism this will recover and stabilise in 2021 somewhere in the optimal utilisation rate range of 60-70%.

- With several pauses due to national and regional lockdowns during the peaks of the pandemic, the overall utilisation rate in Spain dropped significantly in 2020. Activity rebounded in the second part of the year and in 2021, limiting the damage and allowing rental companies to maintain a typical utilisation rate higher than 50%.
- The storage and e-commerce activities that boomed during Covid were a good opportunity to maintain activity during lockdown, bolstering demand for electric scissors in particular.
- In 2021, utilisation rate is expected to return to 2019 levels of around 62%.



Scissors:
55%

Booms:
54%

Definition: Physical number of machines out on hire as % of total number in fleet at any given time.

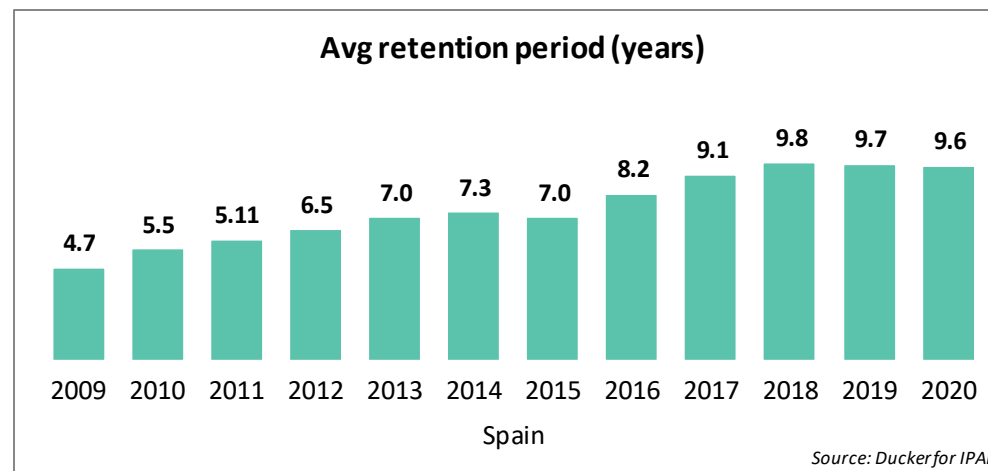
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“Owing to the pandemic we saw a decrease in 2020 of the time utilisation rate. Electric scissors is where we did see the increase in both the market and the time utilisation rate.” – MEWP rental company manager

Spain – retention period

The average retention period of machines in the Spanish rental fleet remained the same as in previous years, and stands at around nine years and six months before equipment is typically replaced.

- As most rental companies decided to maintain their fleet size despite the pandemic, the average retention period was not impacted significantly by the pandemic, standing at 9.6 for the year as a whole. It is expected the rate will not change significantly in the next few years.



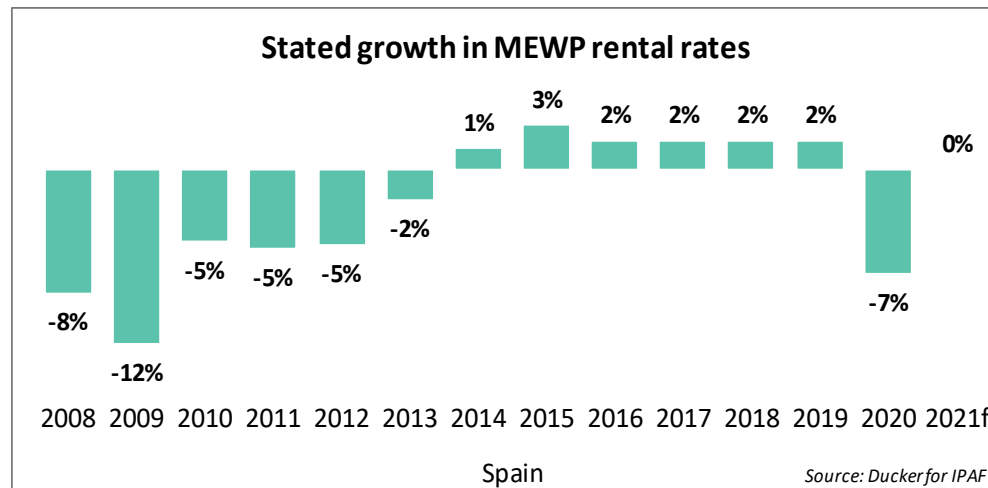
9.2 = 9 years and 2 months

Definition: Period of time that a machine is kept in fleet = selling age if acquired new

Spain – rental rates

Rental rates were severely impacted by the pandemic, as rental companies decided to freeze or drop their prices significantly to maintain activity and try to keep utilisation rates at least above 50%.

- In 2020, rental rates were down by 7% overall, as rental companies tried to remain as competitive as they could to keep their activity levels up during the lockdown, and to partially compensate for their losses as demand returned.
- Rates remain low in 2021: Some of the main rental companies chose to maintain rates at the lower level, preventing competitors from increasing their rates significantly without losing market share. This hyper-competitive atmosphere is likely to see rates remain depressed even into 2022.



“

“There is price pressure from the bigger players in the market, but no massive downward trend.”
– MEWP rental company market strategist



A PERSPECTIVE FROM THE EDITOR OF
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Report 2021 – *SPAIN*

- Spain was one of the countries to be hardest hit by the pandemic in 2020, yet it has shown one of very resilient levels of recovery. The European Rental Association (ERA) estimates that rental activity in Spain fell by 13.5% during the year in 2020. Conversely, this year, the association believes Spain's rental sector will rebound by 5.5%.
- Indeed, Spain's largest rental company GAM, reported sales of €133.6 million for 2020, a decline of 6% against the revenue in 2019. This was primarily due to the first half of 2020, when the pandemic's impact was felt most.
- The company then went on to post a 31% revenue hike for the first half of this year. While the company described this period as being influenced by Covid-19, it says the revenue increase marked a recovery to pre-pandemic levels and represents an 8% rise compared to the same period in 2019.
- GAM's CEO Pedro Luis Fernández is positive for the future and has major plans, not least for the company's zero-emissions fleet and the technologies that go with it. "Currently, 70% of it is electric, and we plan to reach 90% by 2025," he says.
- As part of that strategy, the company has partnered with EIT InnoEnergy, a sustainable energy company, with which it will develop a 'circular economy' project, focusing on the full life cycle of equipment, including remanufactured spare parts to be used in sub-products in different industries.
- As Iván Papell, CEO of Spanish sales and rental company Liftisa explains, the MEWP rental market expanded, rather than contracted, in 2021 and he estimates that rental revenues have grown by double-digits.

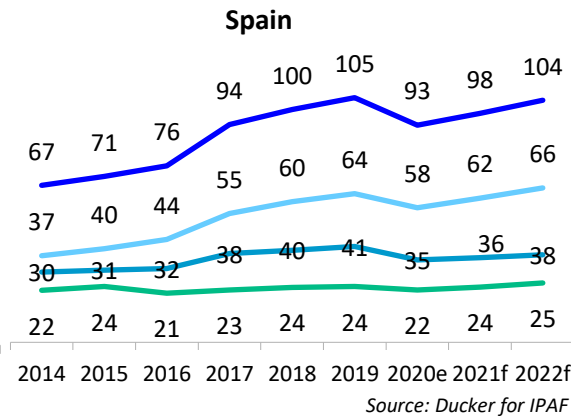
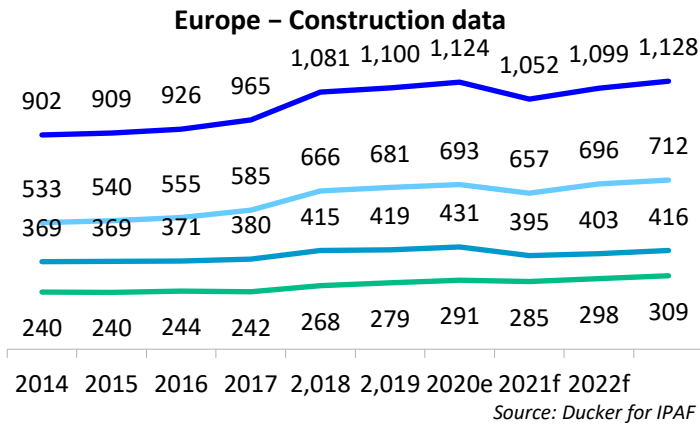
- The significant economic turmoil brought about by the pandemic in 2020, says Papell, was amplified by the fact that financial help for businesses were late to be delivered by the Spanish Government. However, the rental and MEWP sectors were sustained by private and public-sector construction, much of which were already in the pipeline and went ahead despite national restrictions on new projects beginning and non-essential construction.
- Last year, rental companies used state-guaranteed bank loans to stabilise their financial situation, which Papell says means very few companies reduced their fleet size. In recent months, the trend has in fact been towards fleet expansion, he adds.
- However, there has been a longer-term impact. The Spanish rental market is fragmented and faced with new market conditions and a different set of challenges, some rental company owners have been left wondering if they want to continue in business. This, says Papell, may play into the hands of rental players seeking to take advantage and continue the trend of consolidation in the market.
- An example of a recent acquisition in Spain and the attractiveness of the market, came with the news in March that van and truck-mount manufacturer France Elévateur has acquired Movex, based near Barcelona. It follows Movex's own expansion at the end of last year, into a new 6,000-squaremetre facility, which doubled its production capacity.
- On the subject of vehicle-mounted platforms, Spanish rental company Grúas Estación has added a 104m working height Bronto Skylift S104HLA truck mount to its fleet, primarily to service wind farms in its local market of Galicia. It's another example of the growing market in sustainable energy for access equipment.



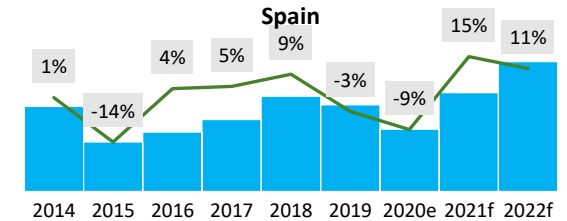
APPENDIX
IPAF Powered Access Rental Market
Report 2021 – *SPAIN*

Spain – construction statistics

Both the construction sector and GDP as whole fell during 2020. A modest recovery will occur in in construction, but overall economy will grow significantly in 2021.



Construction pipeline (billions euros) based on Euroconstruct 2021 figures.



SPAIN GDP per Capita YoY % evolution

Source: FrontierView – Sept 2021

CAGR: Compound annual growth rate

- Residential construction
- Non-residential construction
- Total construction
- Civil engineering / Major infrastructure



The International Powered Access Federation (IPAF) promotes the safe and effective use of powered access equipment worldwide in the widest sense – through providing technical advice and information; through influencing and interpreting legislation and standards; and through safety initiatives and training programmes.

IPAF is a not-for-profit organisation owned by its members, which include manufacturers, rental companies, distributors, contractors and users. IPAF members operate a majority of the MEWP rental fleet worldwide and manufacture about 90% of platforms on the market.

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