EXECUTIVE SUMMARY

IPAF Powered Access Rental Market Report 2018

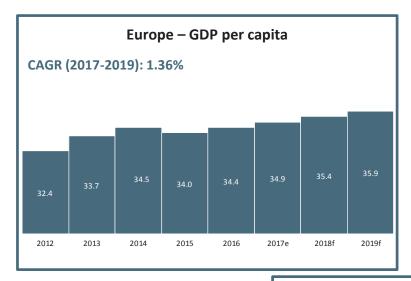
The International Powered Access Federation www.ipaf.org/reports







Macro-economic outlooks are positive in Europe: GDP per capita and construction activity are expected to grow, while unemployment is progressively decreasing.



9.1% 9.5% 9.3% 8.9% 8.3% 7.6% 7.3% 7.1%

2012f 2013 2014 2015 2016 2017e 2018f 2019f Source: Ducker Worldwide for IPAF

Thousand Euro at 2016 prices. Ten countries under study. Source: Ducker Worldwide for IPAF based on Euroconstruct 2017.

Europe - Construction data 994 1,012 1,023 959 909 921 902 890 627 618 606 580 551 533 540 394 397 369 370 378 369 363 240 240 245 2011 2012 2013 2014 2015 2,016 2017e 2018f 2019f Source: Ducker Worldwide for IPAF

Construction put in place in billion Euros based on Euroconstruct 2017.

Source: International Monetary Fund, World Economic Outlook Database, October 2017.

Compound Annual Growth Rate (CAGR) (2017-2019)

Residential construction: 1.66%

- Non-res. constr. : 1.15%

- Total construction: 1.46%

Residential construction

Non-residential construction

Total construction

Civil engineering

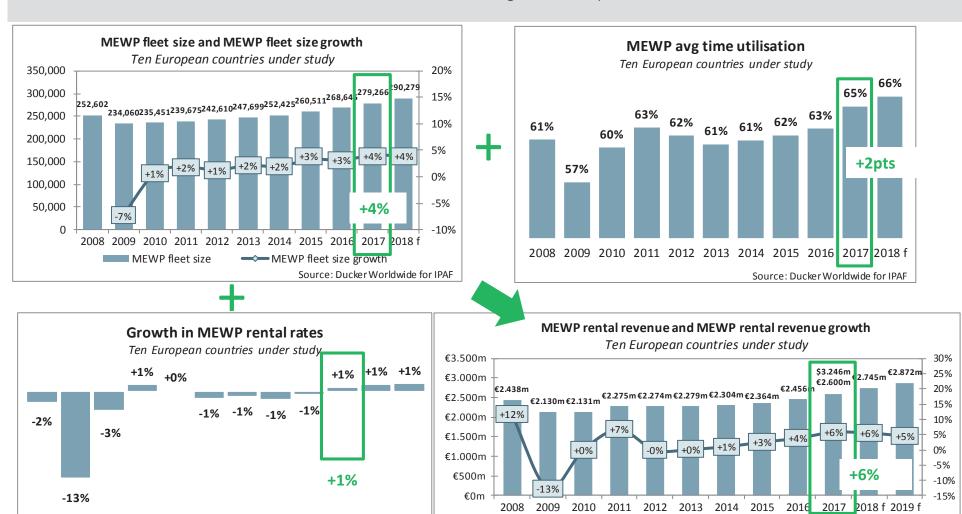


MEWP rental market situation at end 2017.

- Building on green shoots of recovery in 2015 and 2016, a more sustained growth trend in the European MEWP rental market was confirmed in 2017.
- In 2017, the European MEWP rental market revenue was equal to €2.6Bn (\$3.2Bn). The market grew significantly in 2017 (+6%) and total market value increased beyond pre-recession levels. Several factors led to such a positive market evolution: The overall economic situation is good, Brexit has had limited impact so far, and both construction and non-construction sectors generated increasing demand.
- Rental companies complied with increasing demand by expanding fleets (+4% growth rate; 279 260 units) and increasing their average utilisation rate (+2 points now at 65%).
- For the first time in five years, rental companies managed to increase average rental rates (+1% European average; +2%in France and in Spain).
- Nevertheless, this overall improvement hides a number of variances across the ten European countries under study. For instance, intense competition in Germany and the UK prevented rental companies from increasing rental rates (0%). In Nordic countries, the pressure remained intense and led to further decreases (-1% and -2% respectively in Denmark and in Norway).
- Increasing emphasis on maintaining a high-quality fleet allowed rental companies to maintain their attractiveness and competitiveness.
- A clear trend is identified towards greener equipment, with rental companies investing mainly in electric machines, and hybrid machines to a lesser extent. MEWP manufacturers' order books were said to be almost full for 2018, leading to forecasts of another positive year ahead for the European MEWP rental market.



The European market experienced significant (6%) growth in 2017, driven by an increase of all major indicators. The outlooks for 2018 are similar as in 2017 and sustained market growth is expected.



MEWP rental revenue

Prepared for the International Powered Access Federation by Ducker Worldwide

2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018f 2019f

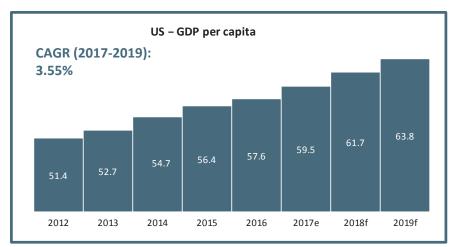
Source: Ducker Worldwide for IPAF

Source: Ducker Worldwide for IPAF

→ MEWP rental revenue growth



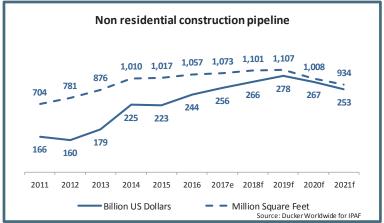
The US economy is expected to sustain positive growth in the next two years, including an increase of the GDP per capita, an overall increase of non-residential construction trends and falling unemployment.



US - Unemployment rate 8.1% 7.4% 6.2% 5.3% 4.9% 4.4% 4.1% 4.2% 2012f 2013 2014 2015 2016 2017e 2018f 2019f Source: Ducker Worldwide for IPAF

Thousand US dollars. Source: International Monetary Fund, World Economic Outlook Database, October 2017

Source: International Monetary Fund, World Economic
Outlook Database, October 2017



Compound Annual Growth Rate (CAGR) (2010-2020): 5.00%

Source: McGraw-Hill Construction, Dodge Construction Outlook 2017

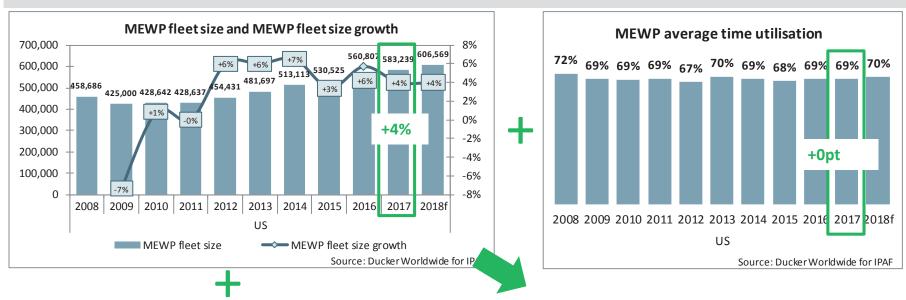


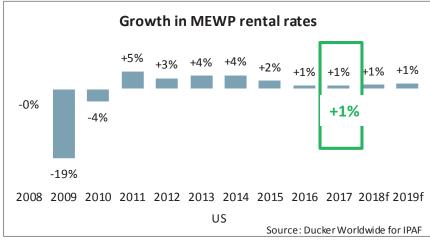
MEWP rental market situation at end 2017.

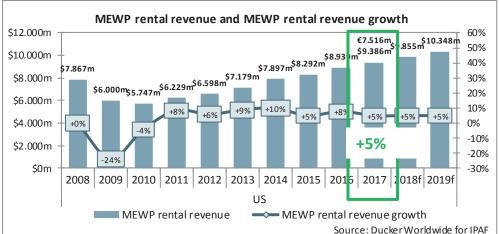
- The MEWP rental market continued to develop significantly in 2017, growing by 5%. Total market value was equal to \$9.4Bn (€7.5Bn), encouraged by the recovering economic situation and growing trend in all construction sectors.
- The total number of MEWPs in the rental fleet was more than 583,000 units, a rise of 4% in 2017. Scissors lifts are still the dominant type of equipment on the market.
- The construction sector accounts for almost three-quarters of MEWPs rental applications. Though activity is currently very fast-growing, the overall construction sector outlooks become more uncertain from 2019 onwards.
- As a result, rental companies take a relatively cautious attitude in their business strategy, expanding fleets to meet
 existing demand and managing to increase rental rates, but many intend to begin reducing their investment levels from
 2019.



All major indicators show positive and sustainable growth for the US MEWP rental market. The market is driven by a combination of strong demand for MEWP equipment as compared to supply. In addition, markets are enjoying favourable government policies linked to the Trump administration.







Prepared for the International Powered Access Federation by Ducker Worldwide

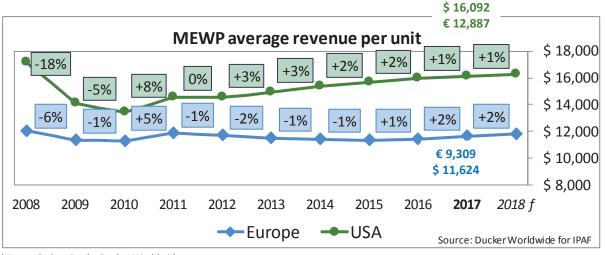


Both the European and US markets have experienced relatively similar market growth in 2017 (around 5-6%), driven by an increase in demand and overall favourable economic contexts.

Region	2017 revenue growth	2017 revenue	2017 fleet size growth	2017 fleet size	Utilisation rate growth	Rental rate growth
Europe*	+ 6%	€2.6 / \$3.2 Bn	+ 4%	279,266	+ 2 pts	+ 1%
USA	+ 5%	\$9.4 / €7.5 Bn	+ 4%	583,239	+ 0 pt	+ 1%

Exchange rate \$1 = €0.801

- Though both the European and the US markets experience similar growth in 2017, the contexts vary: The US MEWP rental market grew for the sixth year in a row, while the trend for growth has begun more recently in Europe.
- Average revenue per unit also grew at a relatively similar pace in both Europe and the US. The European MEWP rental market is now slightly growing faster than the US one.

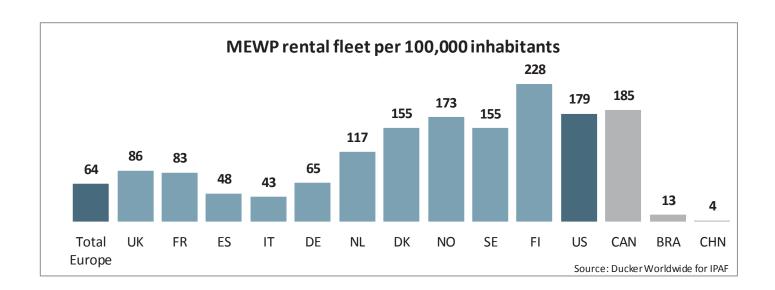


*Ten countries under study representing approx. 85% of the entire European market revenue.



In 2017, the relative maturity of the market in each country under study changed little. Nordic countries are the most mature markets in Europe, while Southern Europe countries and Germany stand as the least mature ones.

• The market penetration is calculated with the following ratio: MEWP rental fleet vs country population.

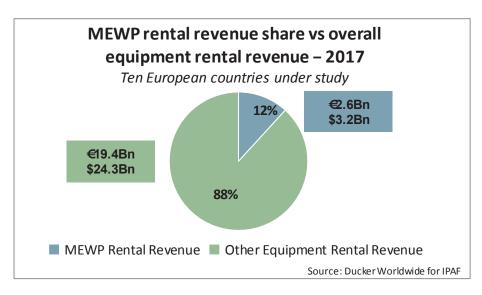


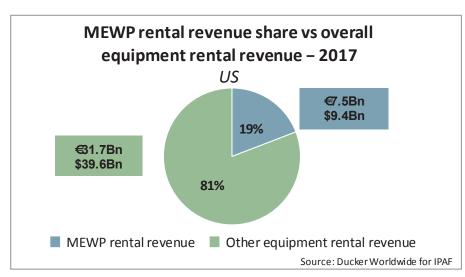


Prepared for the International Powered Access Federation by Ducker Worldwide



MEWP rental market penetration among total rental market is more significant in the US, with a level close to 20%. It is more limited in Europe, at 12% in average (source ERA).





ARA overall equipment rental revenue includes:

3. Construction & industrial equipment

1. Party & event

2. General tools

ERA overall equipment rental revenue includes:

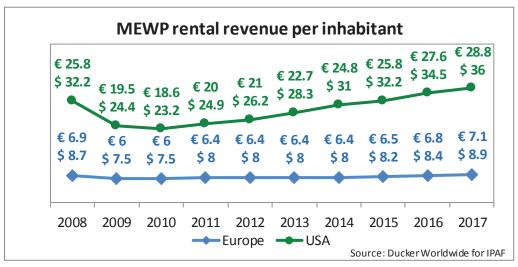
- 1. General plant
- 2. Tools & general equipment
- 4. Power generation & temperature Control
- 5. Accommodation & fencing
- Industrial machinery
- Crane

Exchange rate: \$1 = €0.80084

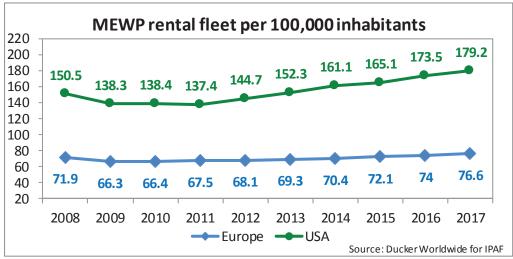
ARA: American Rental Association ERA: European Rental Association



Similar to 2016, the US rental revenue per inhabitant and fleet size per capita both rose, and at a faster rate than in Europe. The US market overall size is higher.



- Average MEWP rental revenue per inhabitant has been increasing in both the US and Europe since 2010.
 Nevertheless, a stronger growth pace is encountered in the US than in Europe.
- Rental fleet size has increased in both the US and Europe, but at a markedly faster rate in the US.



Prepared for the International Powered Access Federation by Ducker Worldwide



In 2017, the worldwide rental MEWP fleet size reached 1.35m units. Strong Asian growth is driven by China, Malaysia, Singapore and Thailand, while the Latin American fleet grew in 2017 but at a much slower rate than the US or Europe.

North America				
Articulated booms	117,400			
Straight booms	137,800			
Scissors	378,000			
Others	17,800			
Total	651,000			

Latin America*		
Articulated booms	19,700	
Straight booms	4,900	
Scissors	20,200	
Others	3,400	
Total	48,200	

^{*}Includes Mexico

EAME	
Articulated booms	98,300
Straight booms	28,100
Scissors	181,000
Others	58,400
Total	365,800

Overall Europe (28 cou	intries) accou	nts for 94%
of total I	EAME fleet	

ASIA - PAC				
Articulated booms	33,200			
Straight booms	50,300			
Scissors	149,800			
Others	54,000			
Total	287,300			

Note: 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.