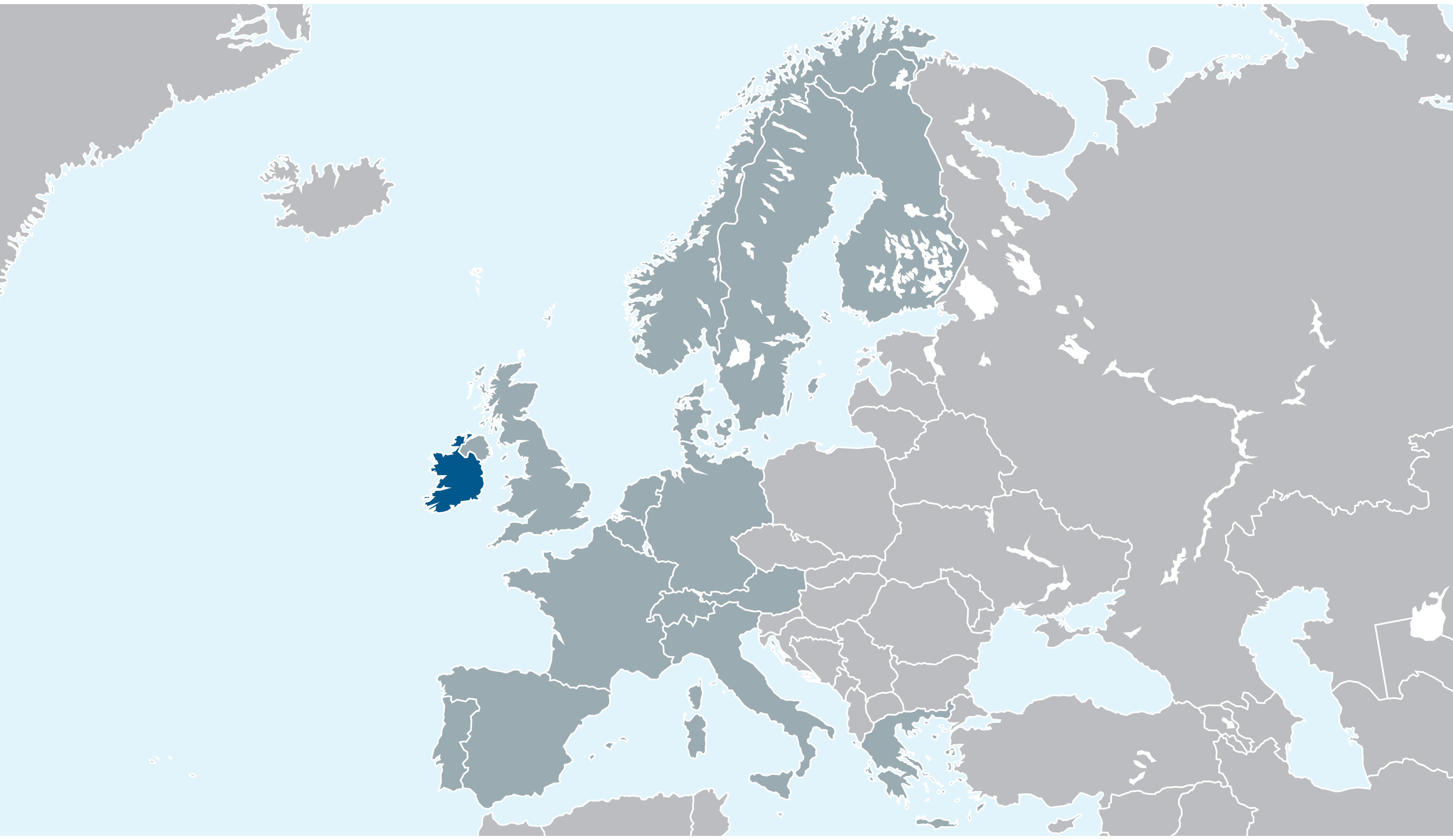
COUNTRY ANALYSIS

The construction equipment industry in Europe

IRELAND

DECEMBER 2020



Off-Highway RESEARCH

EUROPEAN SERVICE

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INTRODUCTION

The objective of this study is to present a concise overview of the development of the market for various types of construction equipment and agricultural tractors in Ireland. This report assesses the major trends that have developed since the publication of Off-Highway Research's last report, which was undertaken in 2014, and offers a forecast for each product sector through to 2024. The report concludes with profiles of leading distributors of construction and agricultural equipment.

The findings presented in this report are based upon Off-Highway Research's own International Database Service, and on information collected during an extensive interview programme with the country's leading distributors and importers, conducted remotely due to the restrictions imposed by Covid-19.

There is no formal exchange of sales statistics between importers of construction equipment, and some of the distributors are responsible for sales in Northern Ireland as well as in the Republic in the south. This leads to some distributors declaring sales for the whole of Ireland, but the statistics shown in this report are only for sales invoiced in the Republic. Some machines are invoiced in the South but delivered to and work in Northern Ireland, while sometimes relatively weak sales in the Republic are often invoiced in Northern Ireland. All depends on the exchange rates of Sterling and the Euro.

Although the Irish market is linked with that of the UK, as many companies sell directly from their UK base, it does not necessarily follow that the Irish market mirrors that of the UK. Ireland was hit much harder by the economic crash, and the memory of the devastation that it caused in the construction sector remains very much in the minds of the suppliers. Whilst this made them very cautious for many years, it has actually served them in good stead during the current health crisis. Having experienced, and survived, a 90 per cent decline in business the feeling is that, whilst the current situation is certainly regrettable, it is by no means insurmountable.

POLITICS AND THE ECONOMY

Table 1. Republic of Ireland: Basic data

Land area (m2)	70,283
Population	4,300,000
Main towns	
- Dublin City	506,000
- Dun Laoghaire & Rathdown	194,000
- Cork	119,000
- Galway	72,000
- Limerick	53,000

Source: Official Statistics

Ireland is a Republic that was formed in 1922 following the partition of the island of Ireland, and for a number of years was known as the Irish Free State. The current written constitution was established in 1937. Its Parliament consists of two chambers, the Dáil (lower house) and Seanad (Senate). There are 160 members of the Dáil, elected by proportional representation for a five-year term. The Senate consists of 60 members, 11 nominated by the Prime Minister (Taoiseach), six elected by the universities and 43 elected by an electorate comprising members of the Dáil, Senate and local councillors. The Senate has powers of consultation and amendment only and may not veto proposals emanating from the Dáil; it has a maximum period of 90 days to consider bills from the lower house.

There are four main political parties in Ireland: Fine Gael, Fianna Fáil, Sinn Féin and the Labour party, plus a number of smaller parties and independent politicians. In the last election, which was held in February 2020, no party received a majority. Both Fine Gael and Fianna Fáil, traditionally the two largest parties, lost votes in the election, while support for Sinn Féin, a left-wing party whose primary aim is to reunify Ireland, surged but still fell short of the number of seats required to form a government. After months of negotiations, Fine Gael, Fianne Fáil and the Green party finally formed a coalition government in June 2020. Fianna Fáil leader, Míchaél Martin replaced Leo Varadkar as Taoiseach.

The Head of State is the President who is directly elected for a seven-year term. The current President is Mr Michael D. Higgins, who was first elected in October 2011, and then re-elected in 2018 for a second term.

ECONOMIC BACKGROUND

Between 1995 and 2007, the Irish economy experienced rapid economic growth, and Ireland became known as 'the Celtic Tiger'. Low corporation tax and a pool of skilled labour attracted strong inward investment. The economic expansion encouraged a major boom in the construction industry, both in terms of infrastructure build and housing, and by 2008 construction accounted for 25 per cent of GDP. Major banks increased lending on the strength of the seemingly endless optimism.

The global credit crunch of 2007 and 2008 hit the Irish economy particularly hard, with major Irish banks seeing huge losses due to their exposure to sub-prime mortgage defaults in US. The subsequent tightening of credit led to a dramatic fall in property prices, which in turn left the banks exposed to even greater losses. Repossession rates rose, but due to the drop in house prices, banks lost significant sums. In an effort to stabilize the situation, in 2008 the Irish government agreed to recapitalize the major Irish banks however this was insufficient and finally in 2010, the Irish government was forced to accept an IMF-EU bailout.

Table 2. Ireland: Economic indicators, 2015-2019

	2015	2016	2017	2018	2019
Real GDP growth (%)	25.1	5.0	7.2	8.2	5.5
Consumer price inflation (average, %)	-0.3	0.0	0.3	0.5	0.9
Private consumption	3.1	5.4	3.1	3.4	2.8
Industrial production	36.9	1.8	-2.2	-5.0	2.8
Exports	38.4	4.6	9.2	10.4	11.1
Imports	26.0	16.4	1.1	-2.9	35.6
Unemployment	9.9	8.4	6.7	5.8	5.0

Source: OECD, CSO, AIB

Of all the countries which received bailouts since the crash of 2007-2008, Ireland was the most diligent in its adherence to the austerity measures, despite the depths of the recession. This allowed the country to exit the bailout after three years, but this was hailed as a ‘milestone’ rather than the end of the road, as the tough economic policies imposed on the country continued – but with good results.

The Irish economy rebounded strongly between 2013 and 2019, led by retail spending and a recovery in investment. GDP grew by 5.5 per cent in 2019, a far cry from the 25.1 per cent increase in 2016, nevertheless making it the fastest growing economy in the European Union for the sixth consecutive year. The volatile nature of Irish GDP is due to the large group of multinational companies which have made Ireland the hub of their European operations (for example Google, Facebook, Apple, Microsoft, IBM, GSK). These companies have been attracted to Ireland not only by its offering of one of the lowest corporation tax rates in Europe, but also its highly skilled, English speaking labour force and its easy access to European markets.

The first quarter of 2020 indicated yet another promising year, with the economy growing by 1.2 per cent, while almost every other EU economy shrank. Then came the outbreak of the coronavirus. Ireland responded swiftly, closing schools and colleges on March 12, and imposing a full lockdown two weeks later and plunging the country into recession. Initial estimates in April predicted the economy would shrink by 10.5 per cent in 2020, but these have been revised to just 2.5 per cent, due to the continuing strong performance by the multinational exporting sector. However, the prospect of a no-trade deal Brexit has led to a forecast in GDP growth in 2021 of 1.4 per cent, down from an anticipated 6 per cent bounce back in growth predicted in April. Ireland has very strong trading links with the UK, especially in agriculture, and under a no-deal Brexit, Ireland and the UK would revert to WTO trade rules, meaning costly tariffs hitting Irish exporters and food producers.

CONSTRUCTION ACTIVITY

Table 3. Ireland: New dwellings completed 2015-2019 (units)

	2015	2016	2017	2018	2019
Dwellings	7,219	9,886	14,353	17,994	21,133

Source: CSO

In the decade up to 2006, residential property prices rose more rapidly than in any other developed-world economy. The housing boom peaked in 2006 with 89,000 new dwellings completed. From 2007 the industry collapsed, and a steady decline resulted in just 4,575 new dwellings completed in 2013, a 95 per cent reduction on the 2006 level.

In May 2014, the Taoiseach unveiled its 'Construction 2020' strategy, a package of measures aimed at stimulating activity in the building industry. The central aim was to triple housing output by 2020 and create 60,000 jobs in the sector. New dwellings have increased year on year, reaching more than 21,000 units in 2019. Housing starts in the first quarter of 2020 continued to increase however this was interrupted in the second by the onset of Covid-19. A recent survey by the Society of Chartered Surveyors Ireland (SCSI) estimated that the pandemic had reduced construction activity by 20 per cent in the first semester. It is widely held that between 16,000 and 18,000 new homes will be built in 2020, which is a far cry from the estimated 35,000 new homes which are required to meet the needs of the growing population.

New homes require new roads, water and waste, public transport, broadband, etc. all of which support civil engineering, however all hangs in the balance and is dependent on no further deterioration of the health crisis.

Project Ireland 2040 encompasses the National Development Plan 2018-2027 and the National Planning Framework and is designed to make provision for the needs of a potential growth in population by over 1 million to 5.7 million by 2040. Under this project the four cities of Cork, Limerick, Wexford, and Galway have a growth target of 50 per cent, double the 25 per cent target for Dublin.

Total investment was estimated at €27 billion in 2019, of which €19.8 billion was private and €7.7 billion was public investment, covering housing, commercial building, public infrastructure, and civil engineering. Forecasts issued in April indicated that public investment would continue in 2020 and 2021, however private investment could be negatively impacted in 2020.

The Covid-19 pandemic resulted in the closure of almost all construction sites, with the exception of essential projects, for a period of seven weeks from the end of March

2020. This resulted in the construction sector suffering its worst quarterly decline on record with output falling by 45.2 per cent between April and June. The residential sector suffered the largest quarterly decline with output falling by 50.9 per cent, while non-residential and civil engineering fell by 43.7 per cent and 42.5 per cent, respectively.

The lifting of restrictions from mid-May brought a welcome bounce back in activity, however due to the prolongation of the health crisis, recent estimates suggest a decline of 16 per cent in construction activity in 2020, followed by a growth of 8.1 per cent in 2021 and 3.8 per cent in 2022.

MINING

Ireland has a well-established mining tradition and is home to the largest zinc mine in Europe, Tara lead and zinc mine in Navan, some 50 kilometres north west of Dublin. The most recent find is of a 30-mile gold trend which spans the border with Northern Ireland.

In addition, there are approximately 350 large commercial quarries operating throughout the country, mainly rock quarries and sand and gravel pit quarries. These include gypsum quarries in Co. Monaghan, fireclay quarries in Co. Laois and marble quarries in Co. Galway.

Demand for industrial minerals, including cement, limestone, sandstone, and gravel grew strongly throughout first decade of the century, as construction activity increased, but plummeted with the declining economic climate after 2007.

AGRICULTURAL ACTIVITY

The Irish agricultural sector contributes €24 billion to the national economy annually. The agri-food sector provided 7.7 per cent of national employment and contributed 7.5 per cent of GNI in 2018.

Irish agriculture is primarily grass-based, with approximately 80 per cent of Irish agricultural land used for grass (silage, hay, and pasture), 12 per cent for rough grazing with the remaining 8 per cent allocated to crops, including cereals, fruit and horticulture production. Beef farming remains the largest agricultural enterprise activity in Ireland in terms of land use and farm numbers, occupying more than two-thirds of the grassland in Ireland, while dairy farms utilise some 25 per cent of grassland.

In common with other European countries, the number of farms in Ireland is decreasing, while those which remain are getting larger, with the average size increasing from 31.4 in 2000 to 32.7 hectares in the 2010 census, significantly smaller than the average farm size of 54 hectares in the UK. Farms in the Southern and Eastern regions were 41.3 per cent larger than those in the Border, Midland and Western regions, with an average size of 38.3 hectares compared to 27.1 hectares.

Agriculture is an important part of the economy, and a vital element in the sector has been the state-owned peat production company, Bord na Móna. Peat has traditionally been used for power generation in the absence of significant indigenous supplies of coal. Unfortunately, peat is one of the most polluting fuels and generates less energy and produces more emissions than coal. As part of Ireland's move towards renewable energy sources, in June 2020, the harvesting of peat was ceased and Bord na Móna's business has gone through radical change, moving away from peat, and focusing on renewable energy, recycling, and peatland rehabilitation operations. While peat production may have been classed as part of the agricultural industry, it was also a significant user of construction equipment.

Bord na Móna has been a leader in the Irish renewables sector for some time, having been involved in the development of Ireland's first ever commercial wind farm on its Bellacorick Bog in Co. Mayo in 1992. The company's assets currently produce approximately 10% of the renewable electricity generated in the Irish energy market and it plans to become one of Ireland's leading renewable energy generators by 2030.

Currently Ireland has the highest share of electricity demand met by onshore wind in the world. In the first six months of 2020, onshore wind supplied almost 37 per cent of electricity, ensuring Ireland is on track to reach the target of 40 per cent renewable energy by the end of the year. Wind energy currently generates 4,130 MW. The Climate Action Plan set a new target of 70 per cent renewable energy by 2030. This would require an additional 4,000 MW of onshore wind farms over the next 10 years to reach 8,200 MW overall.

Wind turbine erection requires heavy lifting equipment, with both large crawler and all terrain cranes being widely used for this application. All terrain cranes are also used for hub maintenance.

Worthy of mention is the gradual increase in forestry in Ireland. The area of forest is estimated to be 770,020 hectares, or 11 per cent of the total area of Ireland. Forest cover is estimated to be at its highest in over 350 years (in the mid seventeenth century, it was estimated that the total forest area was just 2.5 per cent of the total land area). Approximately 51 per cent of the forest area is state owned, with private afforestation only coming to the fore since the mid-1980s. Commercial forestry is having an impact on the agricultural market with farmers accounting for 82 per cent of private lands afforested between 1980 and 2018. For land which was previously used for beef production, beef farmers cannot compete with the values offered by commercial forestry companies with tax breaks and grants available, particularly for moderate to low quality beef land. Projections that forestry is set to become one of the major growth industries of the future are reflected in decisions by a number if leading contractors to invest in new, more modern equipment used in forestry management. Whilst this primarily involves equipment which is specific to the forestry sector, it also includes construction equipment, such as excavators, which are used in the industry.

SUMMARY OF SALES AND MARKET SHARES

Table 4 shows the development of sales of individual products included in this study. Details of the weight categories, horsepower and market shares are contained in each product section.

SALES

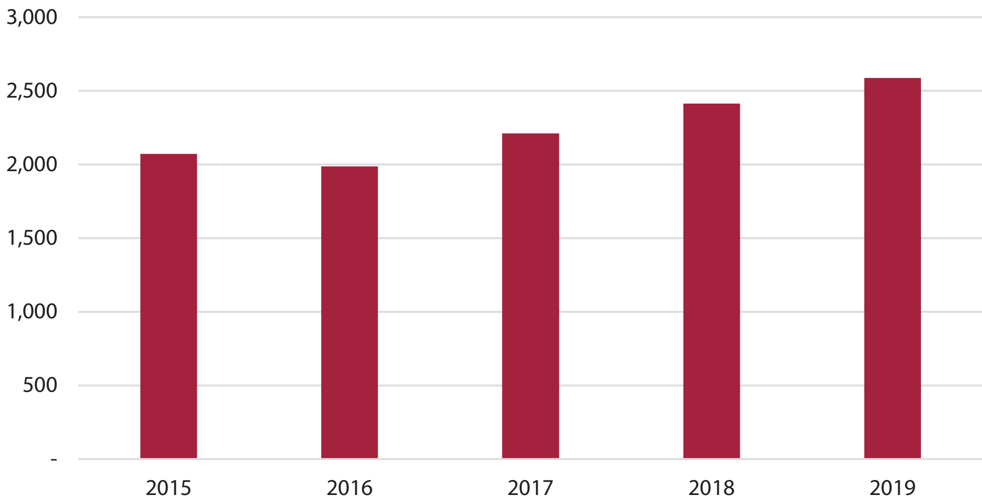
Total sales in 2019 were 25 per cent above those seen in 2015, with demand for most product types experiencing a good rate of increase, the only exceptions being articulated dump trucks, backhoe loaders, crawler excavators and skid-steer loaders.

Table 4. Ireland: Sales of construction equipment and agricultural tractors, 2015-2019 (units)

	2015	2016	2017	2018	2019	% Change 2015-2019
Articulated dump trucks	33	30	27	30	32	-3
Asphalt finishers	8	10	10	12	12	+50
Backhoe loaders	63	27	50	63	54	-14
Compaction equipment*	194	167	168	236	261	+35
Crawler dozers	13	10	10	6	17	+31
Crawler excavators	554	520	540	475	435	-21
Crawler loaders	-	-	-	-	-	-
Mini excavators	741	775	920	940	1,100	+48
Mobile cranes	25	32	16	26	32	+28
Motor graders	1	-	3	-	1	-
Rigid dump trucks	2	2	2	1	2	-
Rough terrain lift trucks - masted	2	2	1	3	8	+300
Rough terrain lift trucks - telescopic	264	240	280	350	400	+52
Skid-steer loaders	29	20	19	65	19	-34
Wheeled excavators	35	35	36	40	40	+14
Wheeled loaders < 80 HP	14	12	13	26	40	+186
Wheeled loaders > 80 HP	94	105	115	144	135	+44
Total construction equipment	**2,072**	**1,987**	**2,210**	**2,414**	**2,588**	**+25**
Agricultural tractors	1,878	1,876	1,796	1,984	1,968	+5

* Ride-on only
Source: Off-Highway Research

Chart 1. Ireland: Sales of construction equipment, 2015-2019 (units)



Source: Off-Highway Research

POPULATION AND END-USERS

The machine population figures shown below are Off-Highway Research's estimates based on historical sales data and interviews undertaken during the study. The most striking result is the increase of 95 per cent in the population between 2001 and 2008, reflecting the rapid growth in construction activity at that time. This resulted in a major overheating of the market, which was followed by a major downward correction when the economy collapsed, as surplus equipment was exported to help cashflow.

Table 5. Ireland: Population of construction Equipment, 1998-2020 (units)

	1998	2001	2008	2013	2020
Articulated Dump Trucks	250	500	1,000	850	500
Asphalt Finishers	120	175	250	175	160
Backhoe Loaders	2,300	2,500	3,000	2,000	475
Compaction Equipment	1,960	2,480	4,710	3,000	3,000
Crawler Dozers	100	150	300	195	190
Crawler Excavators	3,700	4,250	8,500	6,700	3,600
Crawler Loaders	10	10	10	8	8
Mini Excavators	900	2,000	7,500	6,000	5,000
Mobile Cranes	250	250	325	220	220
Motor Graders	20	20	40	40	30
Rigid Dump Trucks	50	50	50	40	40
Rough Terrain Lift Trucks	3,000	5,000	9,000	7,500	3,000
Skid-Steer Loaders	200	450	1,000	750	450
Wheeled Excavators	300	350	600	500	400
Wheeled Loaders	1,500	1,650	2,420	2,000	1,800
Total Construction Equipment	**14,660**	**19,835**	**38,705**	**29,978**	**18,873**

Source: Off-Highway Research

The overall machine population remains at a lower level than it was when the last report on the Irish construction equipment market was published in 2014. It is estimated that the lowest level was probably reached by 2016, but machines have not yet been purchased in sufficient quantity to counteract the huge drop in sales after 2007, followed by the long period of underinvestment.

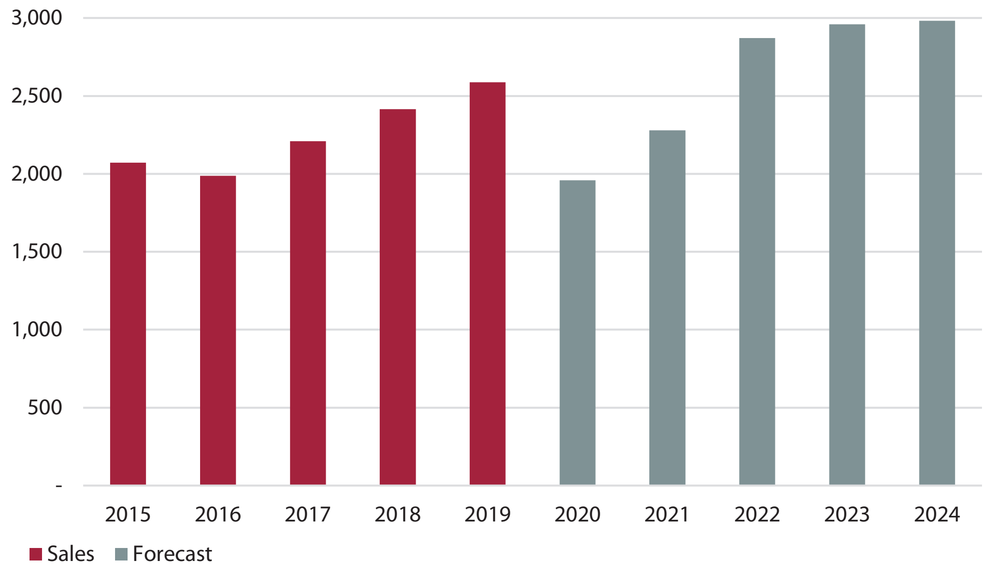
FORECAST

Table 6. Ireland: Forecast sales of construction equipment and agricultural tractors, 2020-2024 (units)

	2020	2021	2022	2023	2024
Articulated dump trucks	24	25	35	40	45
Asphalt finishers	8	10	15	15	15
Backhoe loaders	30	40	55	50	55
Compaction equipment*	217	247	265	270	262
Crawler dozers	7	10	20	20	20
Crawler excavators	320	375	500	575	550
Crawler loaders	-	-	-	-	-
Mini excavators	900	1,000	1,250	1,250	1,300
Mobile cranes	18	26	30	28	25
Motor graders	-	-	2	2	-
Rigid dump trucks	-	2	5	5	5
Rough terrain lift trucks - masted	5	5	5	5	5
Rough terrain lift trucks - telescopic	275	350	450	450	450
Skid-steer loaders	15	20	25	25	25
Wheeled excavators	25	30	35	35	35
Wheeled loaders < 80 HP	25	30	45	45	45
Wheeled loaders > 80 HP	90	110	135	145	145
Total construction equipment	**1,959**	**2,280**	**2,872**	**2,960**	**2,982**
Agricultural tractors	2,025	1,800	1,850	1,850	1,800

* Ride-on only
Source: Off-Highway Research

Chart 2. Ireland: Forecast sales of construction equipment, 2015-2024 (units)



There is likely to be quite a noticeable downturn in sales in 2020, which could take demand back to levels last seen in 2016. The main reason for this decline is the impact of the lockdowns imposed by the coronavirus pandemic. At the end of 2019, a 5 per cent increase in demand had been forecast. The true extent of the impact on the economy and the construction sector is very difficult to assess, but at best, a decline of around 24 per cent is predicted in 2020.

Thereafter demand is predicted to increase in 2021, but to remain around 12 per cent lower than the 2019 level.

MARKET SHARES

The table that follows summarises market shares in the product areas covered in this report. The leading suppliers' representatives are Finning (Caterpillar), Pat O'Donnell (Volvo), ECI (JCB) and McHale (Komatsu). Detailed analyses of each are provided in the section on distributors which appears towards the end of this report.

Table 7. Ireland: Suppliers of construction equipment and their sales, 2019 (units)

	Asphalt finishers	Backhoe loaders	Compaction equipment	Crawler dozers	Crawler excavators	Crawler loaders	Dump trucks	Mini excavators	Mobile cranes	Motor graders	RTLTs	Skid-steer loaders	Wheeled excavators	Wheeled loaders
Atlas Weyhausen	-	-	-	-	-	-	-	-	-	-	-	-	-	6
Bell Equipment	-	-	-	-	-	-	4	-	-	-	-	-	-	-
Bobcat	-	-	-	-	3	-	-	90	-	-	6	13	1	-
Bomag	3	-	97	--	-	-	-	-	-	-	-	-	-	-
Case	-	3	-	-	25	-	-	7	-	-	-	2	-	1
Caterpillar	1	4	-	5	57	-	9	47	-	-	7	-	4	25
Dieci	-	-	-	-	-	-	-	-	-	-	30	-	-	-
Doosan	-	-	-	-	30	-	1	27	-	-	-	-	4	-
Dynapac	3	-	65	-	-	-	-	-	-	-	-	-	-	-
Eurocomach	-	1	-	-	-	-	-	-	-	-	-	-	-	-
Faresin	-	-	-	-	-	-	-	-	-	-	1	-	-	-
Grove	-	-	-	-	-	-	-	-	10	-	-	-	-	-
Hamm	-	-	80											
HBM-Nobas	-	-	-	-	-	-	-	-	-	1	-	-	-	-
Hitachi	-	-	-	-	78	-	-	106	-	-	-	-	-	-
Hyundai	-	-	-	-	45	-	-	2	-	-	-	-	12	-
JCB	-	37	-	-	36	-	-	52	-	-	162	1	5	37
JLG	-	-	-	-	-	-	-	-	-	-	6	-	-	-
Kobelco	-	-	-	-	46	-	-	50	-	-	-	-	-	-
Komatsu	-	1	-	12	66	-	5	24	-	-	-	-	3	17
Kramer	-	-	-	-	-	-	-	-	-	-	15	-	-	19
Kubota	-	-	-	-	13	-	-	374	-	-	-	-	-	4
Liebherr	-	-	-	-	4	-	-	-	18	-	-	-	5	5
Manitou	-	-	-	-	-	-	-	-	-	-	130	-	-	-

Source: Off-Highway Research

Table 7 continued. Ireland: Suppliers of construction equipment and their sales, 2019 (units)

	Asphalt finishers	Backhoe loaders	Compaction equipment	Crawler dozers	Crawler excavators	Crawler loaders	Dump trucks	Mini excavators	Mobile cranes	Motor graders	RTLTs	Skid-steer loaders	Wheeled excavators	Wheeled loaders
Mecalac	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Merlo	-	-	-	-	-	-	-	-	-	-	35	-	-	-
New Holland	-	4	-	-	-	-	-	1	-	-	8	-	-	6
Sany	-	-	-	-	3	-	-	-	-	-	-	-	-	-
Takeuchi	-	-	-	-	5	-	-	100	-	-	-	-	4	-
Tadano	-	-	-	-	-	-	-	-	4	-	-	-	-	-
Vögele	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Volvo	-	-	2	-	9	-	15	50	-	-	-	-	-	36
Yanmar	-	-	-	-	2	-	-	170	-	-	-	-	-	17
Others			17		13			10	-		8	3	2	2
Total	14	54	261	17	435	-	34	1,110	-	1	408	19	40	175

Source: Off-Highway Research

EQUIPMENT ANALYSES

AGRICULTURAL TRACTORS

MARKET SIZE AND TRENDS

In line with most European countries, the number of farms in Ireland is decreasing, while the size of holdings is increasing as farms are amalgamated, creating larger units. Following an increase of more than 4 per cent between 2000 and 2010, according to the 2016 Census of Agriculture, there has been a marginal decrease in the utilised agricultural area since 2010, which stood at 4,886,600 hectares. There are an estimated 137,500 family farms, with an average holding of 32.4 hectares.

The growing economy in the early part of the new millennium, coupled with increasing commodity prices, gave farmers the confidence to buy new machinery to increase yields and productivity. Sales of agricultural tractors broadly mirrored the upward trend of construction equipment peaking in 2007, however the fall in 2008 was less severe than that experienced in the construction sector, with a drop of 16 per cent from 5,025 units in 2007 to 4,531 units in 2008. However, the agricultural sector was unable to withstand the effect of the economic crisis and the real impact of the downturn was felt in 2010, when sales of tractors plummeted to just 1,315 units, a reduction of 74 per cent on the 2007 level. Demand increased steadily to peak at 1,950 units in 2014, before declining gradually to under 1,800 units in 2017. Sales surged by 10 per cent in 2018 reaching their highest level since 2008 and held steady at this level in 2019.

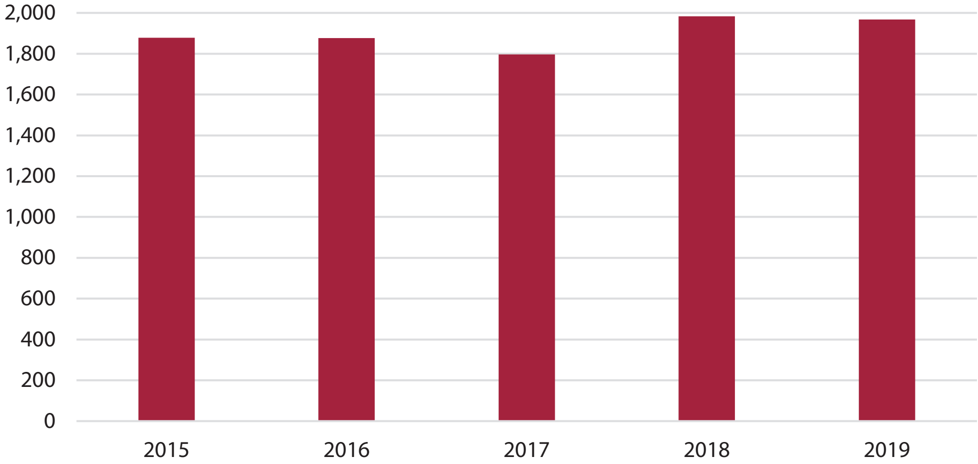
Table 8. Ireland: Sales of agricultural tractors, 2015-2019 (units)

2015	2016	2017	2018	2019
1,878	1,876	1,796	1,984	1,968

Source: Off-Highway Research

The overall trend is for larger machines with higher horsepower ratings, with tractors over 100 horsepower accounting for just under 90 per cent, compared with almost 80 per cent of all new tractors sold in 2013. Registrations of new tractors rated at between 100 horsepower and 120 horsepower continue to be the largest market segment at over 31 per cent, closely followed by the 120 to 150 horsepower segment at 28.3 per cent. Approximately 30 per cent of the market is accounted for by tractors of more than 150 horsepower, which are generally purchased by farm contractors.

Chart 3. Ireland: Sales of agricultural tractors, 2015-2019 (units)



Source: Off-Highway Research

MARKET SHARES

The majority of the leading marques have kept a remarkably stable market share, with companies possibly gaining a percentage point when the product range is updated, or a new machine is launched.

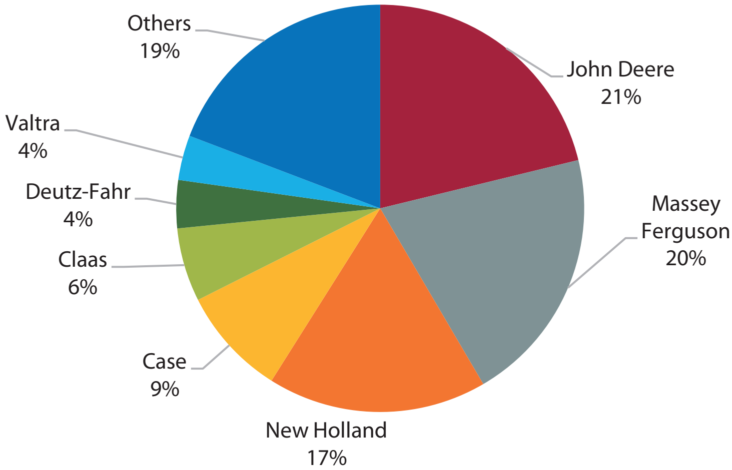
Table 9. Ireland: Sales of agricultural tractors by supplier, 2015-2019 (units)

	2015		2016		2017		2018		2019	
	Units	%	Units	%	Units	%	Units	%	Units	%
John Deere	368	20	356	19	373	21	418	21	417	21
Massey Ferguson	311	17	375	20	400	22	329	17	401	20
New Holland	365	19	393	21	330	18	383	19	342	17
Case	224	12	187	10	151	8	160	8	170	9
Claas	149	8	131	7	110	6	120	6	115	6
Deutz-Fahr	55	3	60	3	64	4	67	3	75	4
Valtra	122	6	90	5	81	5	80	4	70	4
Zetor	83	4	65	3	32	2	30	2	50	3
Landini	70	4	60	3	54	3	52	3	40	2
Same	38	2	35	2	8	-	20	1	22	1
JCB	1		2		3	-	5	-	12	1
McCormick	22	1	25	1	20	1	18	1	-	-
Others	70	4	97	5	170	9	302	15	254	13
Total	**1,878**	**100**	**1,876**	**100**	**1,796**	**100**	**1,984**	**100**	**1,968**	**100**

Source: Off-Highway Research

Three suppliers have dominated the agricultural tractor market for the last 20 years: **John Deere**, **New Holland** and **Massey Ferguson**. John Deere and New Holland regularly vied for first position, however, from 2007 until 2015 John Deere was the clear leader with a market share of between 20 and 30 per cent. It was ousted from the leading position in 2016 but returned to the head of the market in 2019 with a 21 per cent market share. John Deere owes its success to a wide product range, good marketing and an extensive dealer network. It benefits from strong brand loyalty and is a firm favourite with contractors seeking high powered and high specification machines.

Chart 4. Ireland: Suppliers of agricultural tractors and their market shares, 2019 (units)



Source: Off-Highway Research

Massey Ferguson had occupied third position since 2002, however in 2016 it moved into second place with a 20 per cent share and subsequently achieved market leadership in 2017 with a 22 per cent share. Its dominance was short lived, but it was just one point behind the market leader in 2019. It has concentrated on building its distribution network and in recent times has targeted younger farmers.

New Holland led the market for several years at the beginning of the new millennium, and again in 2016, and has otherwise ranked second for most of this century. Although it has slipped into third place, it remains a key supplier in the market.

Table 10. Ireland: Distribution networks for agricultural tractors, 2020

Manufacturer	Importer
Case	CNH Ltd
Claas	Claas UK
Deutz Fahr	SAME Deutz-Fahr UK
Fendt	AGCO UK
John Deere	John Deere Ltd
Landini	AgriArgo UK
Massey Ferguson	AGCO UK
New Holland	CNH Ltd
Valtra	AGCO UK
Zetor	Zetor UK

Source: Company Information

The combined sales of these three suppliers generally total about 60 per cent of the market, with just two other suppliers – New Holland's sister company, **Case,** and **Claas** – achieving sales in excess of 100 units, although both these companies have lost market share during the period under review. The Irish tractor industry is largely run by dealers based in the UK, and each company has a network of independent dealers who report to the UK head office. Future post Brexit arrangements remain to be seen.

POPULATION

There is no accurate figure for the population of tractors working in the market. The agricultural census of 2001 reported that there were 159,000 tractors on Irish farms, yet figures from 2012 show that only 63,000 agricultural machines were taxed that year. It was obvious that many tractors were either being used without tax, or were off the road, but had not been declared as such. A new road tax scheme was introduced in 2013, meaning that from 1 October 2013, farmers were no longer able to retrospectively declare their machines off the road. More than 16,000 tractors 'appeared' for the first time after the government introduced the new rules to clamp down on tax evasion.

The Irish Bulletin of Vehicle and Driver Statistics states that 75,863 tractors were licenced for road use on 31 December 2019, a marginal increase of 1 per cent on the previous year, but 11 per cent lower than the 2014 registration. There are doubtless some tractors which are not necessarily used on roads and remain 'under the radar'. It is therefore estimated that the population is currently in the region of 77,000 units. According to the Irish Bulletin statistics, the largest number of registrations are in Cork, followed by Galway, and Massey Ferguson tractors form the biggest percentage of the active population.

FORECAST

Table 11. Ireland: Forecast sales of agricultural tractors, 2020-2024 (units)

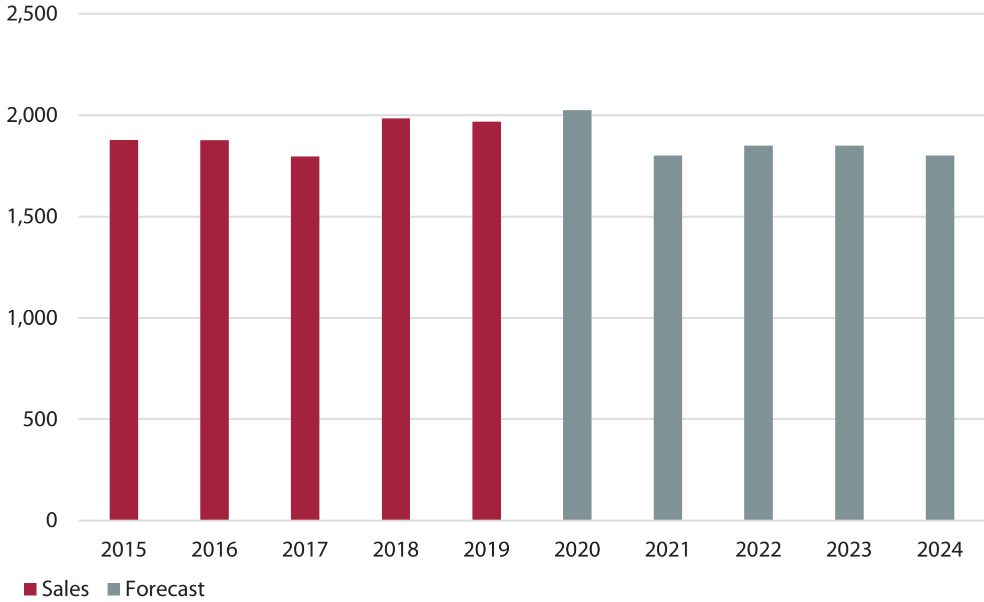
2020	2021	2022	2023	2024
2,025	1,800	1,850	1,850	1,800

Source: Off-Highway Research

Sales in the first two months of 2020 were marginally higher than the same period in 2019, but by April demand had fallen considerably due to the coronavirus crisis, with registrations down by 43 per cent compared with the previous year. The second quarter saw a 35 per cent decrease in new tractor registrations, however July reversed the trend, bring an 8 per cent year increase compared with the same month in 2019.

It should be noted that since the introduction of the split registration year in 2013, July has become a significant month for the registration of new tractors and is regularly the month with the second highest level of registrations after January. Despite Covid-19, a total of 1,994 new tractors have been registered in the first 10 months of 2020, a decrease of just two units compared with the same period in 2019, and an increase of 129 units compared with January to October 2018. It is therefore highly likely that sales in 2020 will exceed the 2,000-unit barrier for the first time since 2008. Given the current uncertainties surrounding the health pandemic, as well as Brexit, it is predicted that sales will fall in 2021 before stabilising at around 1,850 units.

Chart 5. Ireland: Forecast sales of agricultural tractors, 2020-2024 (units)



Source: Off-Highway Research

ASPHALT FINISHERS

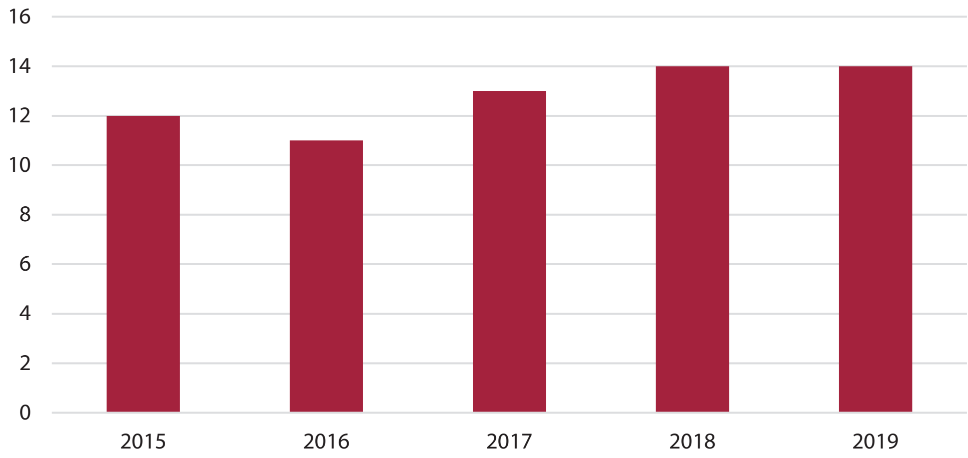
MARKET SIZE AND TRENDS

Table 12. Ireland: Sales of asphalt finishers, 2015-2019 (units)

2015	2016	2017	2018	2019
12	11	13	14	14

Source: Off-Highway Research

Chart 6. Ireland: Sales of asphalt finishers, 2015-2019 (units)



Source: Off-Highway Research

Following an extended period of upgrades and extensions to the road network, sales of asphalt finishers reached 45 units in 2007. This volume was considered high for a market the size of Ireland but was indicative of the numerous road projects that were in progress throughout the country and the lack of machines in the early working population. Demand fell sharply as both infrastructure and building projects dried up through lack of funds and remained at around six or seven units per annum for several years, before increasing gradually to reach 14 units by 2018 as the economy recovered.

The €116 billion Project Ireland 2040 plan to modernise Irish infrastructure held the promise of greater things to come. In addition to the upgrade of existing roads, the plan included the new north runway at Dublin airport, a project which commenced in 2019.

The historical lack of demand for new finishers meant that the few that were bought tended to be the largest machines available, in the belief that they could carry out all the tasks which might be required. Testament to this is the large number of machines sold with 2.5- 3.0 metre retracted screeds which can be extended to 5 - 6 metres. There is also some demand for a compact to medium size finisher, with a paving width of 3-4 metres. The average specification of the machine is high, and they are all fitted with automatic levelling devices.

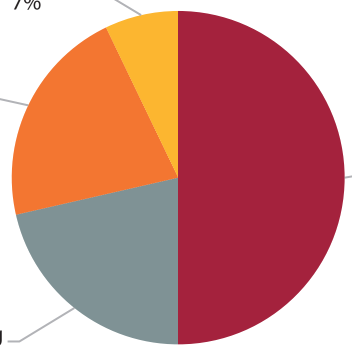
MARKET SHARES

Table 13. Ireland: Suppliers of asphalt finishers and their market shares, 2015-2019 (units)

	2015		2016		2017		2018		2019	
	Units	%	Units	%	Units	%	Units	%	Units	%
Vögele	6	50	5	45	6	46	6	43	7	50
Bomag	2	17	3	27	4	31	4	29	3	21
Dynapac	-	-	-	-	-	-	3	21	3	21
Caterpillar	2	17	1	9	2	15	1	7	1	7
Atlas Copco	2	17	2	18	1	8	-	-	-	-
Total	**12**	**100**	**11**	**100**	**13**	**100**	**14**	**100**	**14**	**100**

Source: Off-Highway Research

Chart 7. Ireland: Suppliers of asphalt finishers and their market shares, 2019 (units)



Source: Off-Highway Research

Vögele is Europe's leading producer, but for many years did not have a strong presence in Ireland, mainly due to its prices, which were considerably higher than those of its competitors. In 2006, it opened up an Irish-based dealership and in 2008 moved into new premises that gave it a distinct advantage over all of its competitors. The strategy paid off and the company has consistently led the market since 2011 generally gaining a market share of between 40 and 50 per cent.

Bomag has recorded regular sales since Dave Power Plant took over its representation in 2014. It is particularly strong in large pavers, selling a total of 10 units since 2014. It generally accounts for between 20 to 30 per cent of the market in terms of unit sales.

Dynapac, which was previously sold under the Atlas Copco brand, is now a sister company to Bomag, as both are owned by the Fayat Group. Until recently, it was sold directly from its UK base, but in March 2020, Belfast based W.A.C. McCandless, which already represented Dynapac in Northern Ireland, was awarded the dealership for the whole of Ireland.

Off-Highway RESEARCH

Caterpillar, previously the market leader, has seen its market share decline over the last 10 years, especially with Vögele's increasing presence. Caterpillar is sold through its dealer, Finning, which is located in Dublin.

Table 14. Ireland: Distribution networks for asphalt finishers, 2020

Manufacturer	Distributor
Bomag	Dave Power Plant
Caterpillar	Finning
Dynapac	W.A.C. McCandless
Vögele	Wirtgen Ireland

Source: Off-Highway Research

POPULATION AND END-USERS

In the 10 years between 1998 and 2008, around 370 asphalt finishers were purchased. The average first life of an asphalt finisher owned by the big national contractors is three to five years or 7,000-8000 hours, while the larger four axle machines are replaced every seven to eight years. Smaller regional contractors have tended to hold on to their finisher for 10 years as the machines are not utilised as much. Through refurbishment and the fitting of new screeds, machine life can be extended to as much as 18 years. Given the very weak demand for equipment over the subsequent five years, some machines inevitably found their way to the export market. In 2014, Off-Highway Research estimated that the population of asphalt finishers had fallen to some 175 machines. The rate of replacement has been relatively slow since 2014, it is therefore estimated that this population has reduced further, and now stands at around 160 units.

The profile of asphalt finisher users has remained relatively unchanged over the past number of years despite the variation in the number of machines being sold. The customer base is dominated by specialist contractors who account for approximately 95 per cent of all sales, the remaining 5 per cent being specialist plant hire companies.

FORECAST

Table 15. Ireland: Forecast sales of asphalt finishers, 2020-2024 (units)

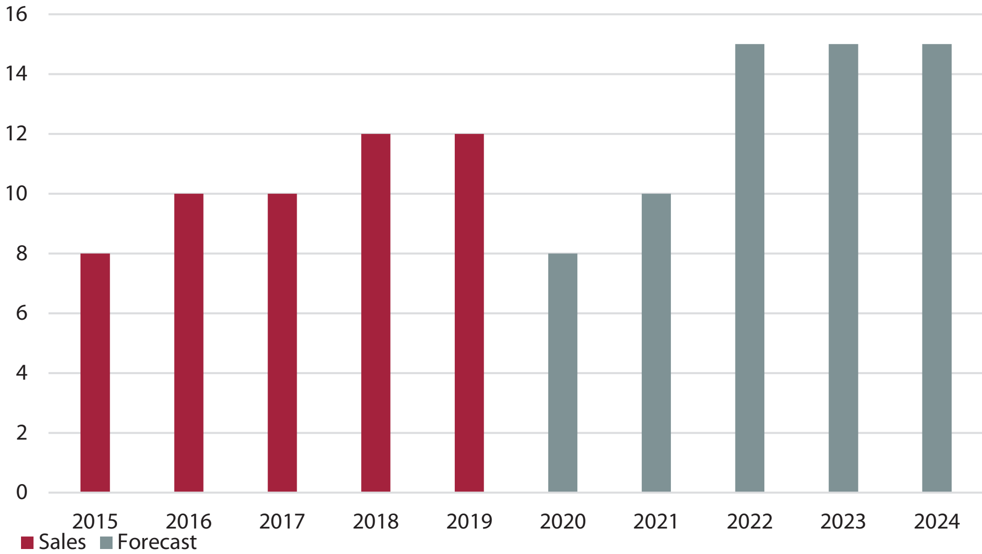
2020	2021	2022	2023	2024
8	10	15	15	15

Source: Off-Highway Research

2020 will experience a slight dip in sales, but ongoing projects will ensure that demand recovers and should reach a minimum of 15 units by 2022.

Machine life was extended during lean years, especially in the case of small companies which did not have continuity of work and lacked cash flow. The drive to improve infrastructure should ensure a steady flow of investment after 2021, with demand eventually returning to levels experienced in the mid-1990s.

Chart 8. Ireland: Forecast sales of asphalt finishers, 2020-2024 (units)



Source: Off-Highway Research

BACKHOE LOADERS

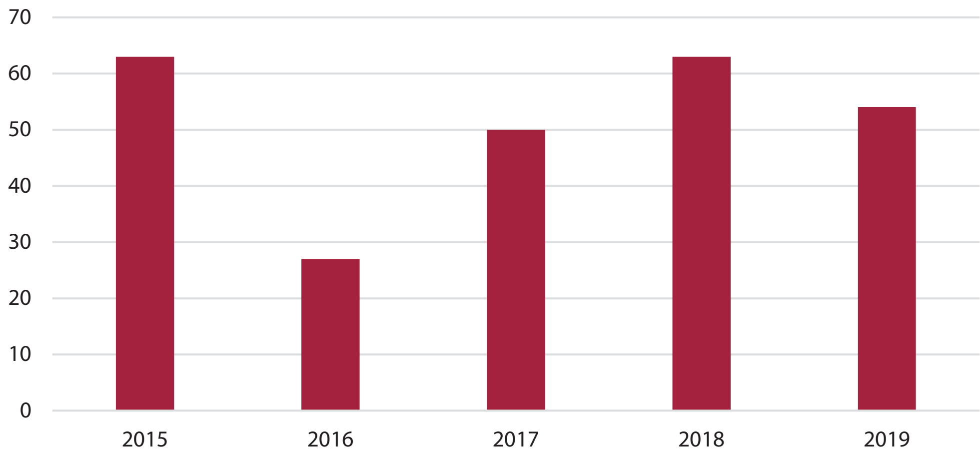
MARKET SIZE AND TRENDS

Table 16. Ireland: Sales of backhoe loaders, 2015-2019 (units)

2015	2016	2017	2018	2019
63	27	50	62	53

Source: Off-Highway Research

Chart 9. Ireland: Sales of backhoe loaders, 2015-2019 (units)



Source: Off-Highway Research

Backhoe loader sales in Ireland peaked at 430 units in 2001, several years before the general construction market reached its highest level. By 2007, prior to the market crash, total sales had fallen to 300 units, reflecting the downward trend experienced in the majority of other European markets as the multifunctional appeal of the backhoe loader submitted to the gradual erosion by competitive products such as the mini excavator and telescopic handler combination, the small wheeled loader and the wheeled excavator. What happened in the next three years, however, was much more dramatic and mirrored the collapse of the general construction equipment market. By 2008, sales had almost halved to 160 units, continuing to fall until 2010 when the market reached rock bottom at 38 units.

Since then, recovery has been both minimal and erratic, reaching 62 units in 2018, before dropping back to 53 units in 2019, just 12 per cent of the 2001 market peak.

The market has changed very little in terms of the type of machine required and is very similar to that in the UK, with JCB's 3CX being the standard machine. The preference remains the four-wheel drive (4WD), 91 horsepower machine, with a 4 in 1 bucket and an extending dipper. Unlike the rest of Europe, where the loading function of the backhoe is more frequently utilised, there is as yet very little demand for equal sized wheels or all-wheel steered machines in Ireland, accounting for around 15 per cent of the market. There are some sales of 3CX Compact machines, which are mainly used for road resurfacing.

The backhoe loader is primarily used as an excavating tool, being used in this mode 80 per cent of its time, compared to 20 per cent as a wheeled loader, and this is why the backhoe loader has become vulnerable to the expanding demand for mini excavators.

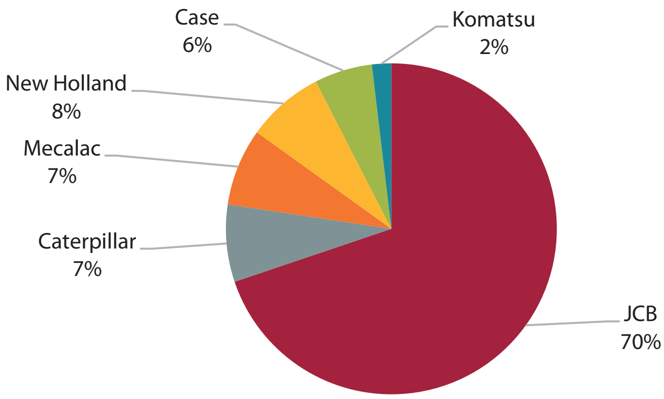
MARKET SHARES

Table 17. Ireland: Suppliers of backhoe loaders and their market shares, 2015-2019 (units)

	2015		2016		2017		2018		2019	
	Units	%	Units	%	Units	%	Units	%	Units	%
JCB	53	84	21	78	42	84	45	71	37	70
Caterpillar	2	3	1	4	-	-	-	-	4	8
Mecalac	-	-	-	-	-	-	3	5	4	8
New Holland	3	5	3	11	3	6	11	17	4	8
Case	5	8	2	7	2	4	3	5	3	6
Eurocomach	-	-	-	-	1	2	-	-	-	-
Komatsu	-	-	-	-	-	-	-	-	1	2
Others	-	-	-	-	2	4	-	-	-	-
Total	**63**	**100**	**27**	**100**	**50**	**100**	**62**	**100**	**53**	**100**

Source: Off-Highway Research

Chart 10. Ireland: Sales of backhoe loaders by supplier, 2019 (units)



Source: Off-Highway Research

JCB has traditionally been the leading supplier, gaining up to 84 per cent of the market during the period under review, although its dominance has been slightly eroded over the last two years as suppliers which had largely been absent from the market during the downturn have returned. It enjoys the most comprehensive product range and is the standard with which others compare themselves.

Caterpillar, which had had no sales in 2017 or 2018, moved into joint second place in 2019 selling four units and gaining an 8 per cent share, in common with 'newcomer', **Mecalac**, which acquired Terex's compact equipment business at the end of 2016. **New Holland** also gained a 9 per cent market share in 2019, a steep fall from the 17 per cent share it had achieved the previous year. Changes in dealerships can disrupt the flow of business, especially during difficult times, and New Holland has had more than its fair share of these in recent times, initially moving from EMS to KK Traders and McSharry, then to Adare Machinery and Philip McCormack Plant, and finally to M&S Machinery.

Komatsu, which had been absent from this product segment in Ireland since 2009, made a welcome return selling one unit in 2019. For a time, the backhoe loader had become a product of reduced interest given its overall decline in popularity, however the company introduced a new range of backhoes in 2018.

Table 18. Ireland: Distribution networks for backhoe Loaders, 2020

Manufacturer	Distributor
Case	Jim MacAdam
Caterpillar	Finning Ireland Ltd.
JCB	ECI
Komatsu	McHale Plant
Mecalac	EMS
New Holland	M & S Machinery

Source: Off-Highway Research

POPULATION AND END-USERS

Under normal conditions the average life of a backhoe loader is about five years, but during the recession, machine life was extended considerably. The past 10 years have seen demand for backhoe loaders fall to record lows, with average sales falling to 50 units per annum, compared with 270 units in the prior 10 years. This implies that new machines sales are not sufficient to replace the number of machines being scrapped. Consequently, the active population has declined steadily over the last number of years, and Off-Highway Research now believes that the number of machines in active use has fallen from around 3,000 units in 2008 to approximately 475 in 2020. Almost two thirds are owner operated, with around 30 per cent belonging to plant hire companies, the balance being mainly used in agriculture. The plant hirer tends to deal primarily in new equipment while the owner operator is involved in both new and used machinery. The agricultural sector primarily purchases second-hand machinery.

FORECAST

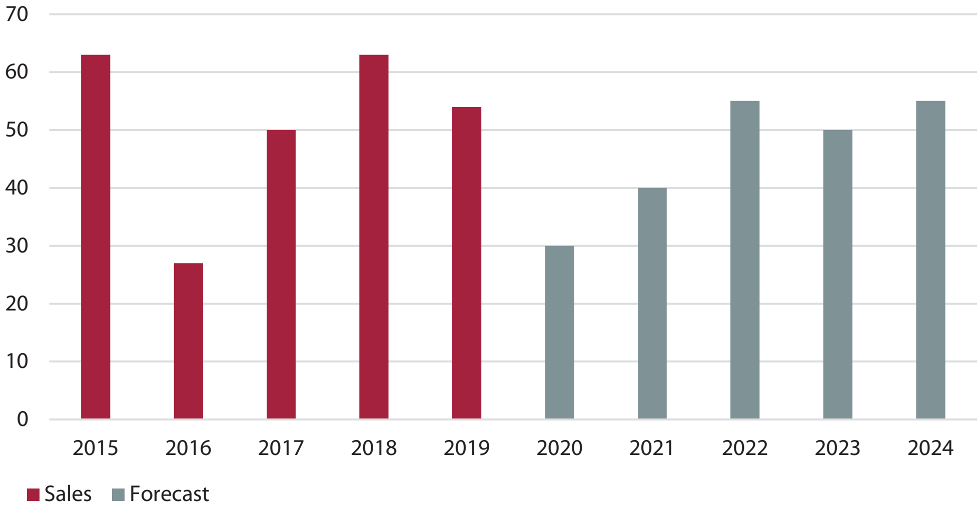
Table 19. Ireland: Forecast sales of backhoe loaders, 2020-2024 (units)

2020	2021	2022	2023	2024
30	40	55	50	55

Source: Off-Highway Research

The market for backhoe loaders has now reached maturity and is primarily one of replacement. The use of specialist machines has gradually negated the need for many multipurpose machines, although the backhoe is used by local councils and small owner operators. Future demand in Ireland is predicted to plateau at between 50 and 60 units.

Chart 11. Ireland: Forecast sales of backhoe loaders, 2020-2024 (units)



Source: Off-Highway Research

COMPACTION EQUIPMENT

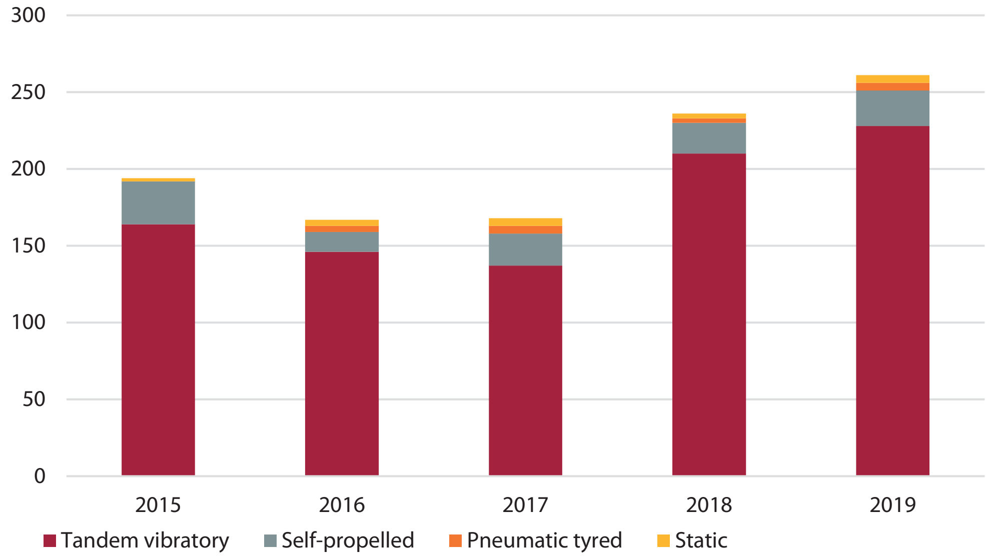
MARKET SIZE AND TRENDS

Table 20. Ireland: Sales of ride-on compaction equipment by type, 2015-2019 (units)

	2015		2016		2017		2018		2019	
	Units	%	Units	%	Units	%	Units	%	Units	%
Tandem vibratory	164	85	146	87	137	82	210	77	228	87
Self-propelled	28	14	13	8	21	13	20	8	23	9
Pneumatic tyred	-	-	4	2	5	3	3	1	5	2
Static	2	1	4	2	5	3	3	1	5	2
Total	**194**	**100**	**167**	**100**	**168**	**100**	**236**	**100**	**261**	**100**

Source: Off-Highway Research

Chart 12. Ireland: Sales of compaction equipment by type, 2015-2019 (units)



Source Off-Highway Research

The market for compaction equipment is largely dependent on road investment programmes. Thanks to the EU's cohesion funds, a generous budget for the development of infrastructure became available and major trunk and ring roads were constructed in the early part of the new millennium, providing an extensive road network throughout much of the country. This expansion led to considerable investment in new machines, with sales increasing from 480 machines in 2003 to almost 700 units in 2007.

As with all types of construction equipment, sales of compaction equipment tumbled after 2007 when government expenditure on infrastructure was severely curtailed and many projects were postponed. There followed several years of low levels of demand, until 2015 when the market finally showed signs of recovery.

Since then, as a result of an increase in the capital investment budget, whilst there have been no major projects on the scale of the boom era, there has been a period, initially of repair and maintenance and more recently of new road building, such as the M11 Gorey to Enniscorthy motorway, which was funded by a public-private partnership. Apart from a slight dip in 2016 and 2017, the market has continued to grow, reaching over 260 units in 2019.

The **tandem vibratory roller** continues to be the machine of choice, accounting for between 80 and 90 per cent of sales of compaction equipment in recent years. Sales of machines weighing less than three tonnes dominate this sector, as their versatility has made them very popular, especially with plant hire companies.

In spite of the investment in roads, there are still relatively few motorways and dual carriageways in Ireland compared with many EU countries. Consequently, demand for larger tandem rollers over 5 tonnes is relatively small, generally accounting for between 5 and 10 per cent of tandem roller sales.

Self-propelled machines became popular on the back of the road building programme after the turn of the century, including for roads and service facilities accompanying the building of wind farms. Initially, sales were primarily in the sub 8 tonnes category, but as larger projects have gradually come to fruition, demand includes much heavier equipment, up to 20 tonnes.

Demand for new **static** and **pneumatic-tyred rollers** is particularly limited, and the existing population of these machines is more than sufficient to meet anticipated demand. The pneumatic-tyred roller is a specialist roller for the compaction of asphalt and is relatively expensive. The machine has a simple transmission and has a long life; therefore, it is not surprising that so few have been sold since the recessionary years. Static rollers have a working life in excess of 15 years even when heavily used, and under less arduous conditions will last for well over 20 years. The large population of these rollers means that they will continue to be used but they will be replaced in fewer numbers in the future.

Pedestrian Vibratory Rollers were traditionally popular for small repairs and for minor site preparation, and were widely used during the downturn, as they are relatively inexpensive and many of the repair works were small. With the improvement in the overall market, demand for this type of roller has declined significantly, small ride-on tandems being the preferred option.

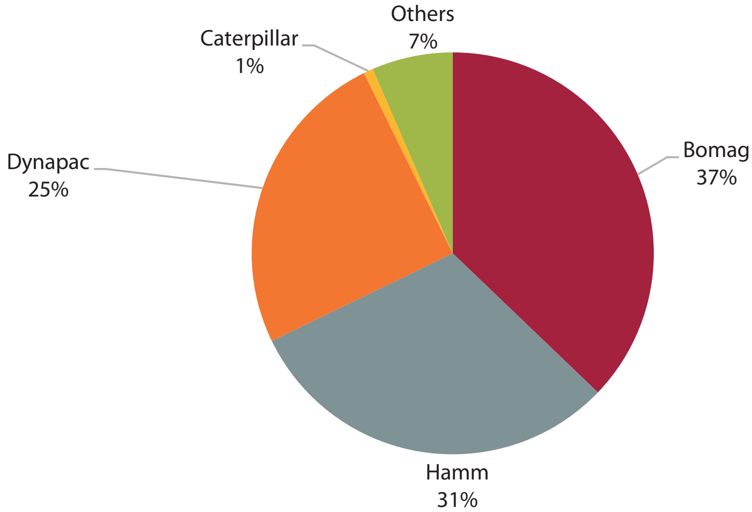
MARKET SHARES

Table 21. Ireland: Suppliers of ride-on compaction equipment and their market shares, by type, 2019 (units)

	Tandem		Self-propelled		Pneumatic tyred		Static		Total	
	Units	%	Units	%	Units	%	Units	%	Units	%
Bomag	83	36	12	52	2	40	-	-	97	37
Hamm	71	31	8	35	1	20	-	100	80	31
Dynapac	59	26	3	13	1	20	2	-	65	25
Volvo	2	1	-	-	-	-	-	-	2	1
Others	14	6	-	-	1	20	3	-	17	7
Total	**229**	**100**	**23**	**100**	**5**	**100**	**5**	**100**	**261**	**100**

Source: Off-Highway Research

Chart 13. Ireland: Suppliers of compaction equipment and their market shares, 2019 (units)



Source: Off-Highway Research

Bomag initially built up an excellent reputation as a leading supplier of compaction equipment through its dealer, TBF Thompson. Following the closure of its Dublin depot in 2010 due to the recession, TBF Thompson continued to serve the market from its headquarters in Northern Ireland, however, in January 2014, Dave Power Plant was appointed Bomag's authorised dealer in the Republic of Ireland. Given its hard work and success on behalf of Bomag, the company has not only retained this dealership despite the re-opening of TBF Thompson's Dublin depot in 2018, but now leads the overall market for compaction equipment.

Hamm has been present in Ireland for many years, initially through GPT (Galway Plant and Tool Hire). In 2006, at the height of the construction boom, Wirtgen established a subsidiary, Wirtgen Ireland, moving into a new state-of-the-art distribution and service facility in Enfield, County Meath, some 25 miles west of Dublin in 2008. The specialist nature of the dealership enabled the company to gain market leadership at this time, but this has been eroded in recent times by both Bomag and Dynapac.

Ranked in third place in the Irish market for compaction equipment is **Dynapac.** Despite having representation via Irlequip, Dynapac was more or less absent from the market between 2009 and 2013. In 2013, WAC McCandless was appointed as sole distributor for Dynapac road construction equipment for Northern Ireland, while the company employed a salesperson and a service partner to handle business in the Republic. In April 2020, an agreement was reached with WAC McCandless whereby its sales territory was extended to cover the whole of Ireland.

These three suppliers account for the bulk of the Irish market. **Caterpillar**, represented by Finning Ireland, **Volvo,** represented by Pat O'Donnell and **JCB**, by ECI all sell some products on the back of their wider product portfolio. **Ammann**, which was previously represented by A&E Equipment, and are now handled by Crumlin Plant Sales in Northern Ireland, and now have a very limited presence in the south.

Table 22. Ireland: Distribution networks for compaction equipment, 2020

Manufacturer	Distributor
Ammann	Crumlin Plant Sales
Bomag	Dave Power Plant
Caterpillar	Finning Ireland
Dynapac	WAC McCandless
Hamm	Wirtgen Ireland
JCB Vibromax	ECI
Volvo	Pat O'Donnell

Source: Off-Highway Research

POPULATION AND END-USERS

There are no official statistics available on the number of compaction equipment unts in operation and the longevity of these machines can result in many changes of ownership. The population was estimated to be in the region of 4,000 units in 2008, but subsequently steeply declined to some 3,000 units. More recent purchases have been of replacement equipment only, therefore the population will not have changed significantly from this total.

The main purchasers of compaction equipment are road contractors for tandem machines, although the importance of rental for machines up to around 2.5 tonnes is growing. Single drum rollers are purchased by earthmoving contractors, as well as rental companies.

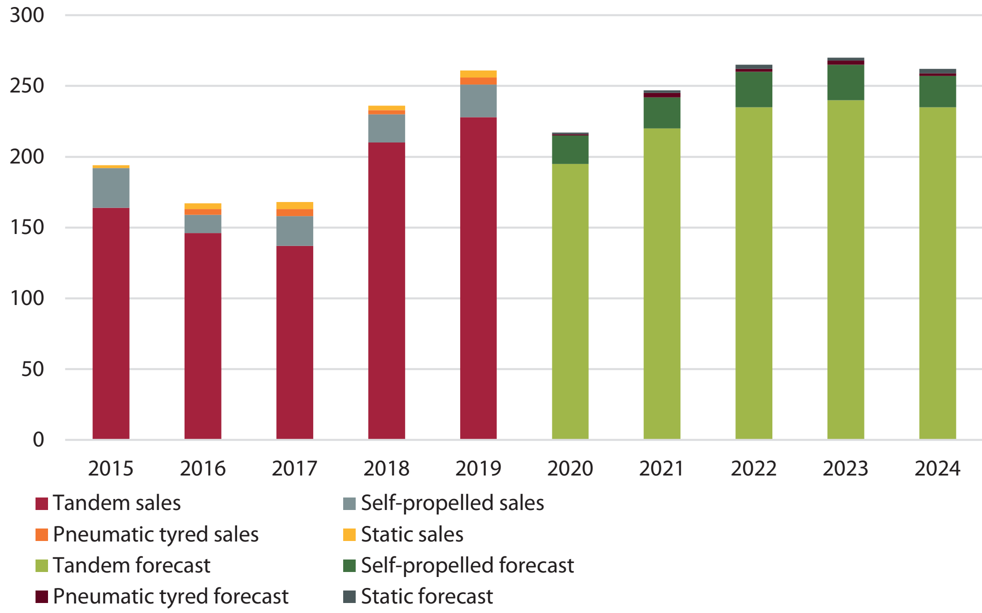
FORECAST

Table 23. Ireland: Forecast sales of compaction equipment by type, 2020-2024 (units)

	2020	2021	2022	2023	2024
Tandem vibratory	195	220	235	240	235
Self-propelled	20	22	25	25	22
Pneumatic tyred	1	3	2	3	2
Static	1	2	3	2	3
Total	**217**	**247**	**265**	**270**	**262**

Source: Off-Highway Research

Chart 14. Ireland: Forecast sales of compaction equipment by type, 2020-2024 (units)



Following the extensive roadbuilding in the early part of this century, current projects are much more modest, but nevertheless provide a sustained demand for roadbuilding equipment. At the same time the existing network of roads has to be maintained. Demand is expected to decline in 2020 due to the impact of the pandemic but return to the 2019 level by 2021, and steadily increasing to reach 262 units by 2024.

CRAWLER DOZERS AND LOADERS

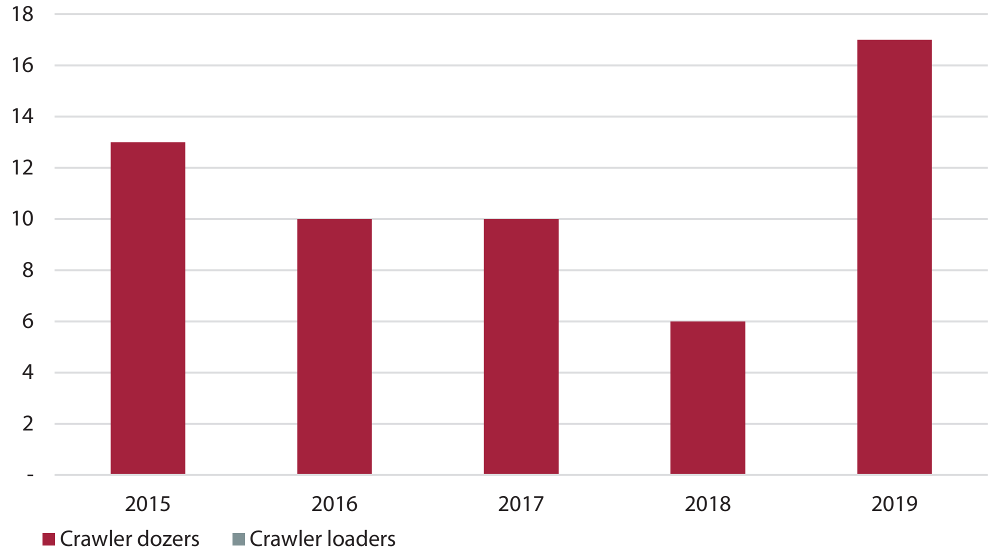
MARKET SIZE AND TRENDS

Table 24. Ireland: Sales of crawler dozers and loaders, 2015-2020 (units)

	2015	2016	2017	2018	2019
Crawler dozers	13	10	10	6	17
Crawler loaders	-	-	-	-	-
Total	**13**	**10**	**10**	**6**	**17**

Source: Off-Highway Research

Chart 15. Ireland: Sales of crawler dozers and loaders, 2015-2020 (units)



Source: Off-Highway Research

The crawler dozer is primarily used on large scale construction projects, and in quarries for the removal of overburden. During the early part of the new millennium, there was a considerable period of new road building across the whole country, which encouraged contractors to both update and expand their fleets. Sales reached 60 units in 2007, dropping to 25 units the following year. Demand remained relatively flat until 2019, when it reached 17 units, the highest level since 2008.

The recent slow pace is due in part to the accumulation of the active population of machines. A total of 240 machines were sold between 2003 and 2007, an average of 48 machines per year, compared with an average of 28 machines per year in the previous five years. There were simply more than enough new machines for the available work, and surplus equipment was sold in the export markets.

There has been little change in the size of machine required in recent years, with the preference lying in the 190-250 horsepower range, typified by the 22 tonne Komatsu D65 and the Caterpillar D6.

MARKET SHARES

At the height of the building boom, this market had up to four participants: Komatsu, Caterpillar, Liebherr and New Holland. Of these, only Caterpillar and Komatsu have been successful in the Irish market over the past 10 years. Both companies enjoy a high reputation in the market, but given the size of the market, the sale of just one or two additional machines is sufficient to swing the balance of power in towards one company or the other.

Komatsu has dominated the crawler dozer market for almost 20 years. During the 1980s when Caterpillar had problems with the launch of its high drive machines, Komatsu exploited the situation and the D65 proved to be a very reliable alternative to Caterpillar's new high drive machine. As a result, the D65 became the standard crawler dozer used by many contractors. The company was ranked in first position until 2010, when the appreciation of the Yen resulted in the D65 model being considerably more expensive than its Caterpillar equivalent. After a four-year hiatus, a period when the overall market remained at a low level, it moved back into first position again in 2015. Cumulative sales over the last five years give Komatsu an overall market share of 59 per cent.

Caterpillar assumed market leadership in 2011, the year after Finning took over the dealership. It retained this position for four years, before ceding to Komatsu. The role of the dealer is crucial in today's market, and its speciality is to offer the dozer in the context of a very wide range of products and complete programme of services for the user. Often customers do not buy only crawler dozers; they buy a variety of machines and then have them supported as a package, from initial advice on machine selection through to the very important disposal of the used machine.

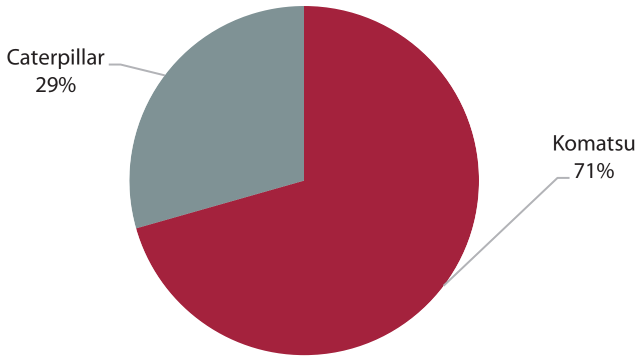
Neither **New Holland** nor **Liebherr** have secured any sales of crawler dozers since the industry collapsed in 2008.

Table 25. Ireland: Sales of crawler dozers by supplier, 2015-2019 (units)

	2015		2016		2017		2018		2019	
	Units	%	Units	%	Units	%	Units	%	Units	%
Komatsu	8	62	6	60	4	40	3	50	12	71
Caterpillar	5	38	4	40	6	60	3	50	5	29
Total	**13**	**100**	**10**	**100**	**10**	**100**	**6**	**100**	**17**	**100**

Source: Off-Highway Research

Chart 16. Sales of crawler dozers by supplier, 2019 (units)



Source: Off-Highway Research

Table 26. Ireland: Distribution Networks of Suppliers of Crawler Dozers, 2020

Manufacturer	Distributor
Caterpillar	Finning Ireland
Komatsu	McHale Plant

Source: Off-Highway Research

POPULATION AND END-USERS

It is estimated that around 75 per cent of sales of crawler dozers are accounted for by earthmoving and road building contractors. Specialist landscaping companies may be assumed to buy no more than 10 per cent of sales annually and even then, only machines in the 100-120 horsepower categories. Larger capacity crawler dozers over 190 horsepower are primarily used in quarrying applications and represent approximately 10 per cent of annual demand.

The total population experienced a steady decline from approximately 300 machines in 2008 to fewer than 200 units by 2013 as much of the equipment was exported to keep businesses afloat. From 2014 the rate of decline slowed as the economy stabilised and the overall construction sector began to improve. Demand for new equipment remained at a relatively low level until 2018, consequently, the machine population is currently estimated at around 190 units.

FORECAST

The market for crawler dozers is primarily a replacement one. Given the relatively good level of sales in 2019, demand is expected to soften in 2020, before recovering to around 20 machine per annum from 2022 to 2024.

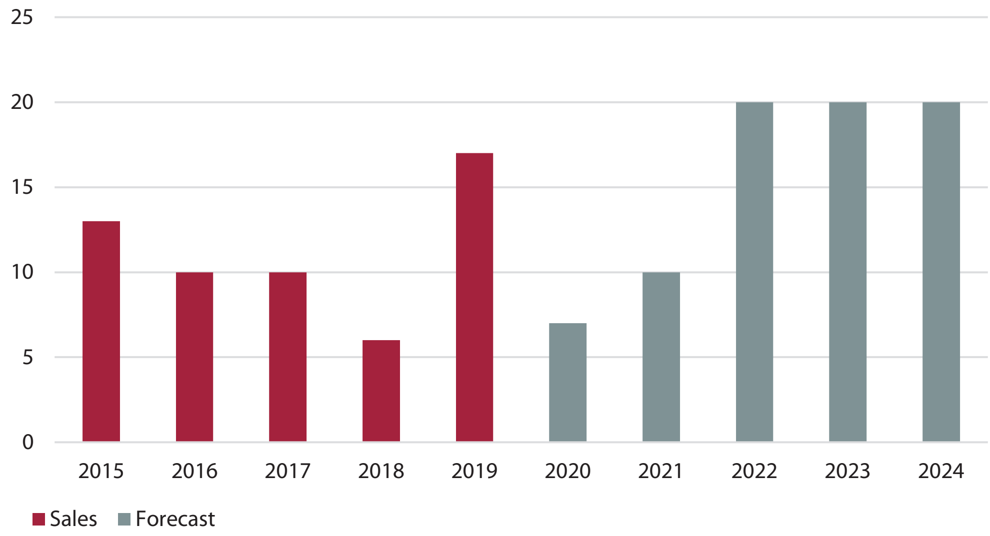
The type of crawler dozer to be purchased in the future will not alter significantly, although there may be a slight increase in the number of very large machines.

Table 27. Ireland: Forecast sales of crawler dozers, 2020-2024 (units)

2020	2021	2022	2023	2024
7	10	20	20	20

Source: Off-Highway Research

Chart 17. Ireland: Forecast sales of crawler dozers, 2020-2024 (units)



Source: Off-Highway Research

CRAWLER LOADERS

There has never been any significant demand for crawler loaders in Ireland, as the role of this machine has been replaced by a combination of the hydraulic excavator and articulated dump truck. When the market as a whole improved in 1994 the option of using the new modern methods was taken, and sales of crawler loaders declined to such an extent that there have been no sales at all since 2006.

Those suppliers that do have a crawler loader in their product range do not actively promote the product. Consequently, it unlikely that there will be any real demand for the product in the future.

DUMP TRUCKS

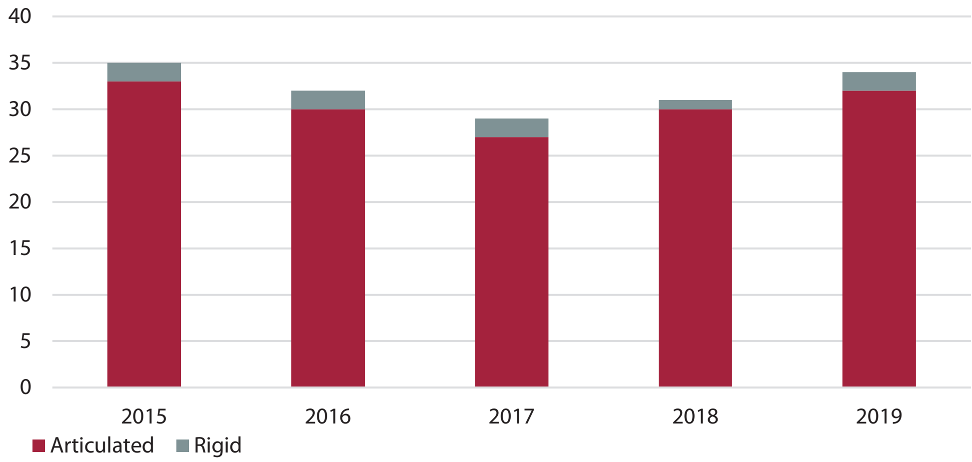
MARKET SIZE AND TRENDS

Table 28. Ireland: Sales of dump trucks by type, 2015-2019 (units)

	2015	2016	2017	2018	2019
Articulated	33	30	27	30	32
Rigid	2	2	2	1	2
Total	**35**	**32**	**29**	**31**	**34**

Source: Off-Highway Research

Chart 18. Ireland: Sales of dump trucks by type, 2015-2019 (units)



Source: Off-Highway Research

During the early part of the new millennium, demand for **articulated dump trucks** expanded rapidly, fuelled by the growing number of infrastructure projects during that period. The rapid expansion in the road network meant that the dump truck sector became one of the larger markets in Europe, with almost 200 machines sold in 2007. At that point, the bubble burst and combined sales for the five years between 2009 and 2013 were less than half of the 2007 total. 2016 saw a partial recovery, with demand reaching 30 units, a level at which it has more or less remained since then.

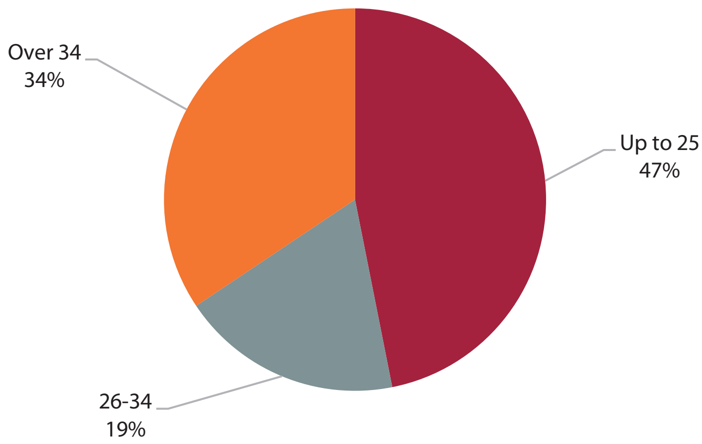
During the construction boom, the predominant machine was the 30 tonne machine, but by 2013 it had lost its predominance, with the larger over 34 tonne class accounting for almost half of the market. The current market has reverted to the popular 25 tonne machine, which accounted for almost half the sales in 2019. At the same time, the 40 tonne dump truck has become a popular purchase, typified by the Komatsu HM 400-5, the Volvo A40 and the Bell B40E.

Table 29. Ireland: sales of articulated dump trucks by capacity, 1997-2019

	1997		2001		2007		2013		2019	
Tonnes	Units	%	Units	%	Units	%	Units	%	Units	%
Under 25	5	12	15	11	50	26	2	11	15	47
26-34	31	76	71	54	94	48	8	42	6	19
Over 34	5	12	45	34	50	26	9	47	11	34
Total	41	100	131	100	194	100	19	100	32	100

Source: Off-Highway Research

Chart 19. Ireland: Sales of articulated dump trucks by capacity, 2019 (tonnes)



Source: Off-Highway Research

The erosion of demand for the small capacity **rigid dump truck** by the articulated variety has resulted in an increase in the preferred size of rigid dump truck, but the volumes are so small that one should not overestimate the importance of any perceived trends; in fact, there were no sales of rigid dump trucks at all in 2012 and 2013. The standard machine is now one of 65 tonnes capacity, reflecting the recent increase in the average size of crusher used in the majority of quarries. Large quarries often require an 85 tonne machine, but their numbers are very few.

Table 30. Ireland: Sales of rigid dump trucks by capacity, 1997-2019

	1997		2001		2007		2013		2019	
Tonnes	Units	%	Units	%	Units	%	Units	%	Units	%
Under 45	-	-	-	-		-	-	-	-	-
45-65	5	100	-	-	4	100	-	-	2	100
Over 65	-	-	3	100	-	-	-	-	-	-
Total	**5**	**100**	**3**	**2**	**4**	**100**	**-**	**-**	**2**	**100**

Source: Off-Highway Research

MARKET SHARES

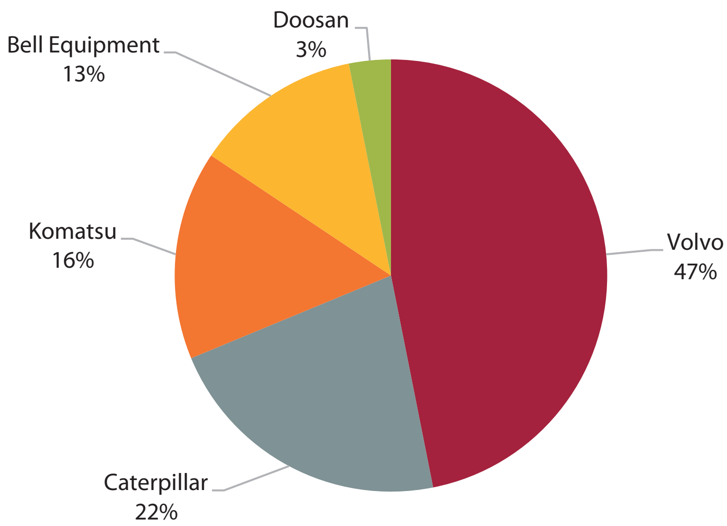
ARTICULATED DUMP TRUCKS

Table 31. Ireland: Suppliers of articulated dump trucks and their market shares, 2015-2019 (units)

	2015		2016		2017		2018		2019	
	Units	%	Units	%	Units	%	Units	%	Units	%
Volvo	15	45	12	40	14	52	18	60	15	47
Caterpillar	3	9	4	13	5	19	6	20	7	22
Komatsu	3	9	2	7	-	-	1	3	5	16
Bell Equipment	7	21	8	27	7	26	4	13	4	13
Doosan	3	9	4	13	1	4	1	3	1	3
Terex	2	6	-	-	-	-	-	-	-	-
Total	**33**	**100**	**30**	**100**	**27**	**100**	**30**	**100**	**32**	**100**

Source: Off-Highway Research

Chart 20. Ireland: Suppliers of articulated dump trucks and their market shares, 2019 (units)



Source: Off-Highway Research

In common with its performance in other parts of Europe, **Volvo** is the dominant supplier in the articulated sector, having originally introduced the product and its concept to Ireland. Its share of the market has generally been between 40 and 50 per cent over the last five years, peaking at 60 per cent in 2018.

Caterpillar's share has increased steadily over the last five years, from 9 per cent in 2015 to 22 per cent in 2019. After a period of absence, large contractors, which are Caterpillar's traditional customer, have once again been active in the market, contributing to the company's increase in sales.

Komatsu has had more of a rollercoaster period, its market share reaching 38 per cent in 2012, conversely, making no sales at all in 2014 and 2017. In some cases, its success has come when it has been able to take advantage of its competitors' inability to meet demand, but it is also a reflection of its strong performance in the excavator market.

Bell Equipment generally commanded a 10 to 15 per cent market share during the boom period but failed to make any sales for six years following the downturn in construction activity. It re-entered the market in 2015, moving into and maintaining second place for three years, before slipping back to fourth place in 2019. Bell has had several changes of dealership over the last few years, having been sold by EMS, EMI and more recently by TBF Thompson.

Doosan's presence in the market has also been sporadic and it has not been able to challenge the stronger brands of Volvo and Komatsu in recent times, its 9 per cent share gained in 2015, declining to just 9 percent by 2018. In January 2020, the company announced changes to its dealer network in an attempt to boost sales (see below).

Terex's performance has also been affected by changes in dealerships over the years, initially from MacAdam to TBF Thompson, which ceased trading in the south of Ireland due to the recession, conducting business there only from its Northern Irish branch. In 2015, EMS in Dublin was appointed the official dealer of both articulated and rigid Terex dump trucks but has failed to make significant inroads to the market since then.

RIGID DUMP TRUCKS

Table 32. Ireland: Suppliers of rigid dump trucks and their market shares, 2015-2019 (units)

	2015		2016		2017		2018		2019	
	Units	%	Units	%	Units	%	Units	%	Units	%
Caterpillar	2	100	2	100	2	100	1	100	2	100
Total	**2**	**100**	**2**	**100**	**2**	**100**	**1**	**100**	**2**	**100**

Source: Off-Highway Research

Even at the height of the construction boom, sales of rigid dump trucks reached just seven units in 2008. Since then, the rigid dump truck market has all but disappeared in Ireland with a total of just 13 units sold in the 10 years since 2010, mainly due to the major reduction in quarrying activity. In 2007, 54 million tonnes of sand and gravel, plus 79 million tonnes of crushed rock were quarried in Ireland. By 2013, this had fallen to 5 million tonnes of sand and gravel and 20 million tonnes of crushed rock. By 2018, the quarrying sector had made a small recovery, production of sand and gravel increasing to 7.5 million tonnes and crushed rock to 27.8 tonnes, but this does not require any major renewal or expansion of rigid dump truck fleets.

Caterpillar, as the dominant supplier to the quarrying industry, has been awarded the business that has been available during this downturn, whereas **Komatsu**, in spite of the support of its dealer, McHale, has failed to make any sales since 2008.

The volumes are extremely low and the award of one contract has a significant impact upon market share in any particular year, so not too much must be read into the analysis of market shares.

Table 33. Ireland: Distribution networks for dump trucks, 2020

Manufacturer	Distributor
Bell Equipment	TBF Thompson
Caterpillar	Finning Ireland
Doosan	Philip P McCormack
Komatsu	McHale Plant
Terex	EMS
Volvo	Pat O'Donnell

Source: Off-Highway Research

POPULATION AND END-USERS

The rigid dump truck is sold almost exclusively to quarries, with a smaller number operated by the larger civil engineering contractors.

Table 34. Ireland: Population of dump trucks by type, 2020 (units)

Rigid	40
Articulated	500
Total	**540**

Source: Off-Highway Research

The articulated dump truck is primarily sold to two customer segments, earthmoving contractors, and sand and gravel pits. The population increased rapidly on the back of the new building programme up to 2008, but then contracted sharply due to the total cessation of infrastructure build, and companies were forced to sell equipment in order to ensure their businesses survived. Since then, the rate of replacement has been at a much lower level than before, resulting in a population of between 400 and 500 machines.

Rigid dump trucks can have a long life of 10 to 15 years. Demand has been at a low level for many years, and many of the oldest machines have not yet been replaced. It is estimated that the population of rigid dump trucks has fallen to between 35 and 40 units, around 30 per cent lower than in 2008.

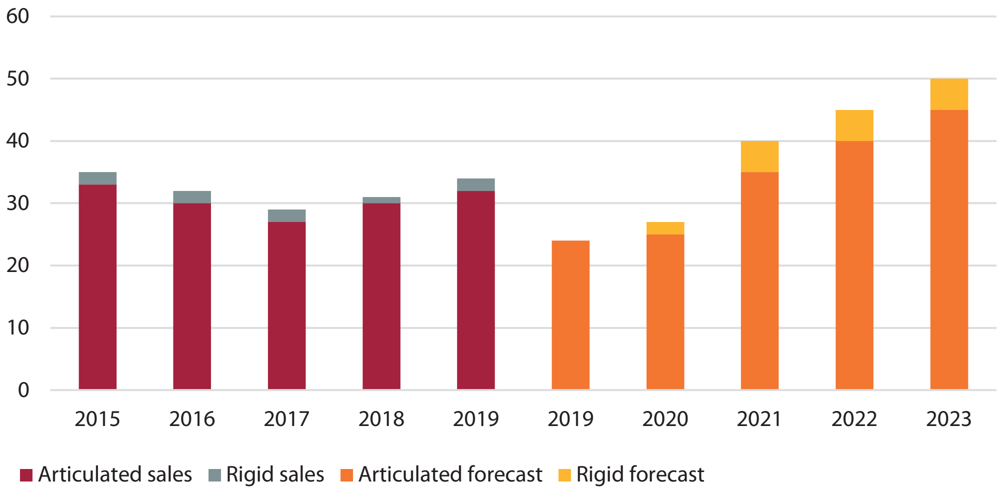
FORECAST

Table 35. Ireland: Forecast sales of dump trucks by type, 2020-2024 (units)

	2020	2021	2022	2023	2024
Articulated	24	25	35	40	45
Rigid	-	2	5	5	5
Total	**24**	**27**	**40**	**45**	**50**

Source: Off-Highway Research

Chart 21. Ireland: Forecast sales of dump trucks by type, 2020-2024 (units)



Source: Off-Highway Research

Sales of dump trucks are notoriously difficult to forecast, and the advent of one or more large civil engineering projects or an increase in quarry production can lead to unexpected fluctuations in demand. The forecast therefore only represents the anticipated replacement of existing fleets.

HYDRAULIC EXCAVATORS

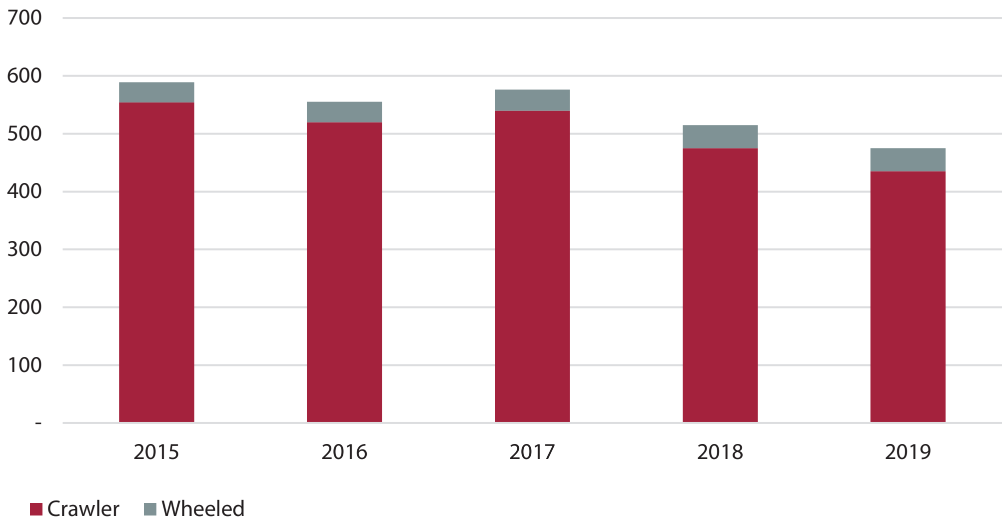
MARKET SIZE AND TRENDS

Table 36. Ireland: Sales of hydraulic excavators by type, 2015-2019 (units)

	2015	2016	2017	2018	2019
Crawler	554	520	540	475	435
Wheeled	35	35	36	40	40
Total	**589**	**555**	**576**	**515**	**475**

Source: Off-Highway Research

Chart 22. Ireland: Sales of hydraulic excavators by type, 2015-2019 (units)



Source: Off-Highway Research

The hydraulic excavator market more than doubled in size between 2004 and 2007. The influx of EU cohesion funds, added to a buoyant economy, created a huge growth of new roads, industrial estates, and buildings throughout the country, which in turn led to a major expansion in the housing market. This resulted in significant additional machinery being required to meet the increased demand, with both new and old equipment being imported in much greater quantities than ever before. The wide-ranging array of new works meant that the increase in sales volumes was felt all size classifications.

This all came to an abrupt halt in 2007, when sales plummeted from 1,540 units to 485 in 2008 and dropped further to 133 units in 2009 – a mere 9 per cent of the 2008 peak. The picture grew increasingly pessimistic with the market reaching rock bottom in 2011, with just 69 units sold. After three years of low level sales, an upturn in the economy helped to boost the construction sector. 2014 finally saw the start of the first major road project in several years, (the aforementioned Gort Tuam link), a project which required both dump trucks and excavators. The prospect of new projects created sufficient confidence for machinery owners to start replacing ageing equipment, with demand more than doubling in 2015.

Sales of crawler excavators remained above the 500-unit mark for three years. Despite a decline by 21 per cent over the five-year period, they remain above the 10-year average of 315 units.

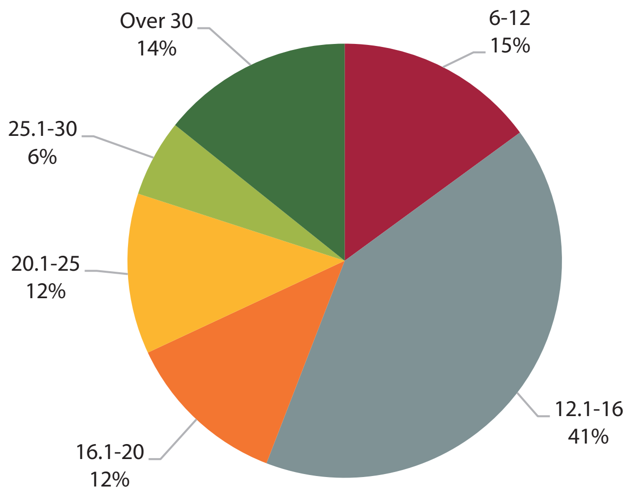
CRAWLER EXCAVATORS

Table 37. Ireland: Sales of crawler excavators by weight category, 2015-2019

	2015		2016		2017		2018		2019	
	Units	%	Units	%	Units	%	Units	%	Units	%
6-12	69	12	66	13	75	14	77	16	65	15
12-16	263	47	247	48	305	56	230	48	178	41
16-20	49	9	50	10	39	7	55	12	53	12
20-25	83	15	68	13	52	10	58	12	52	12
25-30	18	3	32	6	14	3	21	4	25	6
Over 30	72	13	57	11	55	10	34	7	62	14
Total	**554**	**100**	**520**	**100**	**540**	**100**	**475**	**100**	**435**	**100**

Source: Off-Highway Research

Chart 23. Ireland: Sales of crawler excavators by weight category, 2015-2019



Source: Off-Highway Research

There have been no major changes in the distribution of size classifications in the crawler excavator market over the last five years. The largest category remains the 12 – 16 tonne capacity, with almost 50 per cent of the market favouring the 14 tonne machine. The next largest segment is the 6-12 tonne category, in other words, the midi excavator, the importance of which has gradually increased over the years. There is strong evidence that the midi excavator is replacing the backhoe loader in many of its traditional applications.

There is still significant demand for products between 16 and 25 tonnes. The most widely accepted machine in this classification remains the 22 tonne excavator. Machines above 30 tonnes experienced a surge in demand in 2019, primarily due to an increase in sales of 36 tonne machines.

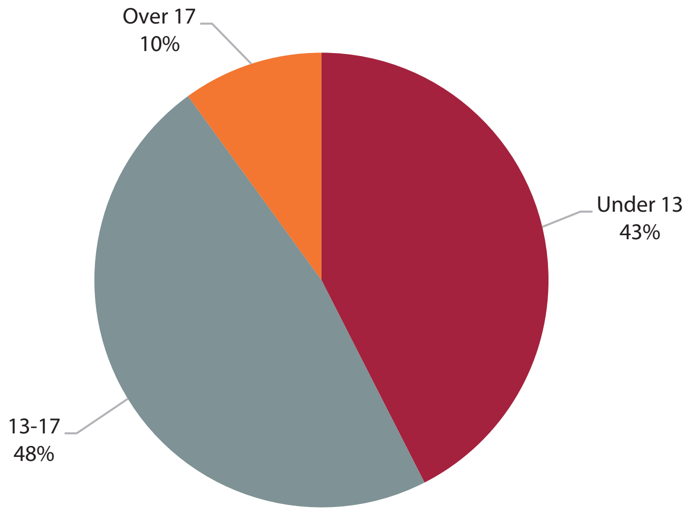
WHEELED EXCAVATORS

Table 38. Ireland: Sales of wheeled excavators by weight category, 2015-2019

	2015		2016		2017		2018		2019	
	Units	%	Units	%	Units	%	Units	%	Units	%
Under 13	11	31	9	26	8	22	12	30	17	43
13-17	16	46	20	57	18	50	19	48	19	48
Over 17	8	23	6	17	10	28	9	23	4	10
Total	**35**	**100**	**35**	**100**	**36**	**100**	**40**	**100**	**40**	**100**

Source: Off-Highway Research

Chart 24. Ireland: Sales of wheeled excavators by weight category, 2015-2019



Source: Off-Highway Research

The wheeled excavator market in Ireland is relatively small, in fact it is the smallest wheeled excavator market in Europe. It experienced modest growth during the boom years, but the demand for new machines was limited. The availability of cheap 13-16 tonne crawler machines, together with a large population of backhoe loaders, severely reduced demand for the wheeled excavator. Sales peaked at 95 units in 2007, declining to just 13 units in 2011. As the construction sector improved, demand reached 40 units in 2019, albeit slightly below the historic demand level.

The 13-17 tonne class is the most popular category, accounting for almost half of all wheeled excavator sales. Demand for heavier machines over 17 tonnes fell sharply in 2019 and now represent just 10 per cent of overall sales, compared with 23 per cent the previous year. By contrast, sales of wheeled excavators under 13 tonnes have increased to 43 per cent.

MARKET SHARES

CRAWLER EXCAVATORS

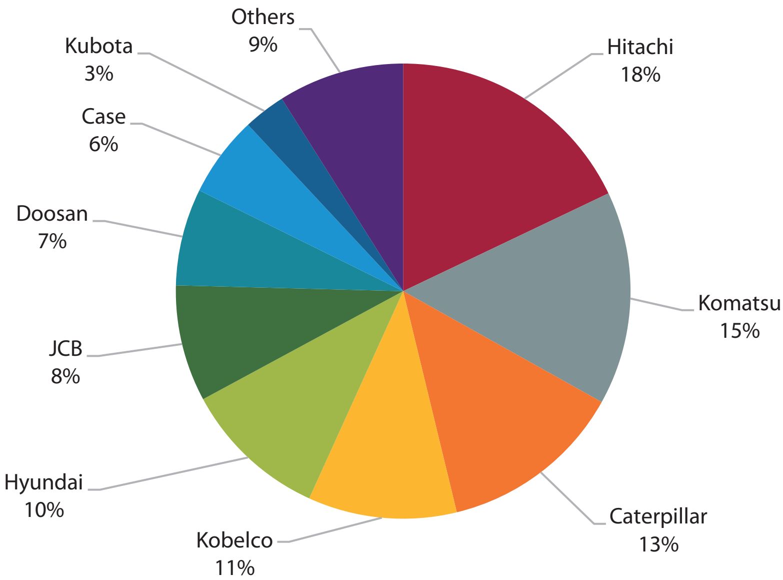
At the height of the construction boom there were 17 suppliers active in the very competitive crawler excavator market, and even more supplying the second-hand market. By 2013, this number had dwindled to nine or 10, with 86 per cent of the market being held by the top five suppliers. The return of several suppliers has resulted in a less concentrated market, the top five accounting for 67 per cent of total sales in 2019.

Table 39. Ireland: Suppliers of crawler excavators and their market shares, 2015-2019, (units)

	2015		2016		2017		2018		2019	
	Units	%	Units	%	Units	%	Units	%	Units	%
Hitachi	140	25	135	26	153	28	85	18	78	18
Komatsu	38	7	52	10	71	13	72	15	66	15
Caterpillar	51	9	47	9	58	11	62	13	57	13
Kobelco	75	14	69	13	56	10	55	12	46	11
Hyundai	98	18	68	13	44	8	54	11	45	10
JCB	27	5	39	8	44	8	43	9	36	8
Doosan	2	-	23	4	42	8	39	8	30	7
Case	52	9	39	8	26	5	16	3	25	6
Kubota	10	2	8	2	-	-	16	3	13	3
Volvo	15	3	14	3	8	1	11	2	9	2
Takeuchi	3	1	5	1	7	1	7	1	5	1
Liebherr	4	1	3	1	4	1	4	1	4	1
Bobcat	1		1		3	1	2		3	1
Sany	23	4	6	1	5	1	5	1	3	1
Yanmar	-	-	-	-	-	-	-	-	2	
Eurocomach	1		2		2		-	-	-	-
New Holland	4	1	1		-	-	-	-	-	-
Others	10	2	8	2	17	3	4	1	13	3
Total	**554**	**100**	**520**	**100**	**540**	**100**	**475**	**100**	**435**	**100**

Source: Off-Highway Research

Chart 25. Ireland: Suppliers of crawler excavators and their market shares, 2019, (units)



Source: Off-Highway Research

Hitachi has been market leader for the last five years, despite having a somewhat chequered dealership history in the country. Following the Fiat-Hitachi split in 2002, its dealer, McSharry, opted to go with Fiat-New Holland, and TBF Thompson took over the dealership. The collapse of the construction sector resulted in Thompson closing its Dublin operation on 2010, whilst maintaining a presence in Northern Ireland. Hitachi's market share fell from 5 per cent to zero at this time. In 2012, the company's market share soared to 27 per cent when McSharry was once again appointed its dealer, however in December 2014 McSharry was appointed Kobelco's dealer for Ireland. Hitachi responded by giving TBF Thompson the eastern side of the country, with McSharry retaining the west. Thompson's territory was finally extended to the whole country when it re-opened premises in Dublin in 2018.

Komatsu weathered the crash better than most, gaining market leadership with a 28 per cent share in 2008, up from 21 per cent when the market peaked in 2007. Between 2010 and 2014, it ranked either first or second, with market share varying from 15 to 29 per cent. Following its decline to sixth position in 2015 it has steadily improved its position and has ranked in second place for the last three years, laterally with a 15 per cent market share. Its dealer, McHale, is totally dedicated to the Komatsu franchise and has been established long enough to prove it can compete equally with the leading suppliers.

Caterpillar has had mixed fortunes over the past 10 years, leading the market in 2009 with a 41 per cent share, but slipping as far down the ranks as joint seventh with just 5 per cent the following year. This coincided with its long-term dealer, McCormick MacNaughton, going into receivership. At this point, the dealership was awarded to Canadian company, Finning. Its market share has increased steadily, ranking in third place with a 13 per cent market share for the last three years.

Kobelco re-entered the European market in 2013, following the ending of its 10-year alliance with CNH. McSharry Bros was duly appointed exclusive dealer for Ireland, both north and south, in 2014. In 2015 it enjoyed a high level of sales to companies, eager to welcome the return of the brand and helping it to take third position behind Hitachi and Hyundai, with a 14 per cent market share. The following year, by selling just one more unit than Hyundai, it eased into second place. Over the last three years, it has ranked in fourth place, with a market share of between 10 and 12 per cent.

Hyundai typically achieved a market share of 6 to 9 per cent and ranked outside the top five manufacturers between 2005 and 2009. The company then started to move up the league table, just edging into first place ahead of Komatsu in 2013. This was the first time Hyundai had taken leadership since it entered the Irish market in 1995 and was testament to the hard work of its dealer, Whelan Plant, based in the west of Ireland, especially given that this region recovered more slowly than the east. It held onto the leadership for one more year, and has since slipped down to fifth place, but generally selling just one machine less than its nearest rival.

JCB is well established as one of the major suppliers in the country. When the market dropped to almost its lowest level, it moved up to first place in 2010 as conditions became increasingly difficult and many players dropped out of the market altogether. As the sector has improved over the last five years and suppliers have returned, JCB has moved down to sixth place, generally with an 8 or 9 per cent market share.

These six suppliers accounted for 75 per cent of crawler excavator sales in 2019, the remaining 25 per cent being divided between some 10 additional suppliers.

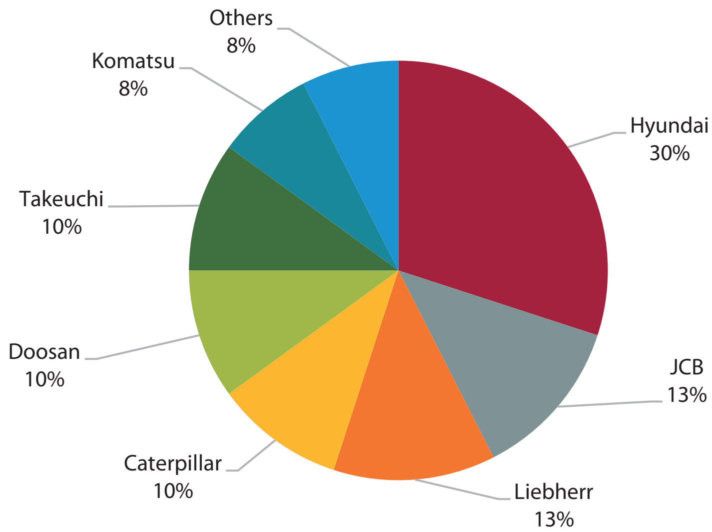
WHEELED EXCAVATORS

Table 40. Ireland: Suppliers of wheeled excavators and their market shares, 2015-2019, (units)

	2015		2016		2017		2018		2019	
	Units	%	Units	%	Units	%	Units	%	Units	%
Hyundai	9	26	11	31	7	19	6	15	12	30
JCB	6	17	7	20	8	22	11	28	5	13
Liebherr	4	11	2	6	4	11	5	13	5	13
Caterpillar	1	3	1	3	3	8	3	8	4	10
Doosan	-	-	5	14	3	8	5	13	4	10
Takeuchi	4	11	3	9	3	8	4	10	4	10
Komatsu	5	14	3	9	5	14	3	8	3	8
Bobcat	-	-	-	-	-	-	-	-	1	3
Case	1	3	-	-	-	-	-	-	-	-
Others	5	14	3	9	3	8	3	8	2	5
Total	**35**	**100**	**35**	**100**	**36**	**100**	**40**	**100**	**40**	**100**

Source: Off-Highway Research

Chart 26. Ireland: Suppliers of wheeled excavators and their market shares, 2019, (units)



Source: Off-Highway Research

The positions of the various companies involved in the wheeled excavator market have changed regularly over the period under review, reflecting the constant changes in both products and dealerships.
The greatest progress has been made by **Hyundai**, which has been market leader for three of the last five years, despite having been absent from this market in 2011 and 2012. **JCB** has also fared well during the period under review, progressing from fifth position in 2014 to take market leadership in both 2017 and 2018, latterly with a 28 per cent market share. In 2019 it took joint second place with **Liebherr**. Looking at the five year period, Liebherr appears to have progressed in terms of ranking, but not in terms of market share, especially if one goes a little further back, to 2014, when it was market leader with a 28 per cent share. That said, the total market that year reached just 25 machines, meaning that the sale of just a few extra could have a marked impact on a company's market share.

Doosan, which failed to gain any sales in 2015, has generally ranked third since then, often with equal sales to **Takeuchi** and **Caterpillar. Komatsu**, which ranked second with a 14 per cent market share in 2015 and 2017, has dropped out of the top five since then.

The wheeled excavator volumes achieved by most suppliers are relatively small and often come as a result of selling a crawler excavator to a customer who also requires a wheeled machine.

Table 41. Ireland: Distribution networks for hydraulic excavators, 2020

Manufacturer	Distributor
Case	Jim MacAdam
Caterpillar	Finning
Doosan	EMS, Philip P. McCormack
Hitachi	TBF Thompson
Hyundai	Whelan Plant
JCB	ECI
Komatsu	McHale Plant
Kubota	Whelan Plant
Liebherr	Liebherr Ireland
New Holland	Adare Machinery; Philip P. McCormack Plant
Takeuchi	BFM
Yanmar	O'Regan Plant
Volvo	Pat O'Donnell

Source: Off-Highway Research

POPULATION AND END-USERS

Under normal market conditions, the average first life of an excavator is five years, after which it is traded-in and sold on to Irish customers, often small contractors or agricultural customers. These machines are then sold for cash after another three to five years and are then scrapped. This would suggest that the average life of a machine is around 10 years. At the height of the construction boom, it was estimated that there were as many as 9,000 hydraulic excavators in the country.

When times are difficult, machine life tends to be extended. As a result of the complete collapse of the construction sector in 2008, as happened with all types of construction equipment, in order to generate cash flow, younger models of both wheeled and crawler excavators were heavily exported when demand fell sharply in 2009-2010. Machine purchases since then have fallen far short of the volumes from the boom era, consequently, it is estimated that the total population of hydraulic excavators has declined to fewer than 4,000 machines, of which approximately 90 per cent are crawler excavators.

The crawler excavator is sold to a mixture of plant hire companies and contractors. Around 10-15 per cent of the sales of machines under 16 tonnes traditionally go into agriculture, the remainder to plant hirers and small contractors. Wheeled excavators of this size are sold largely to rehandling customers, although a growing number are being utilised by road contractors. A recent growth area has been waste and recycling centres, together with the scrap and materials handling sectors.

The 16-24 tonne crawler excavator is usually sold to general contractors and plant hire companies, whereas the 24-50 tonne unit is predominantly sold to the general contractor. Larger crawler excavators are usually purchased by specialist demolition contractors and the quarrying and mining sector.

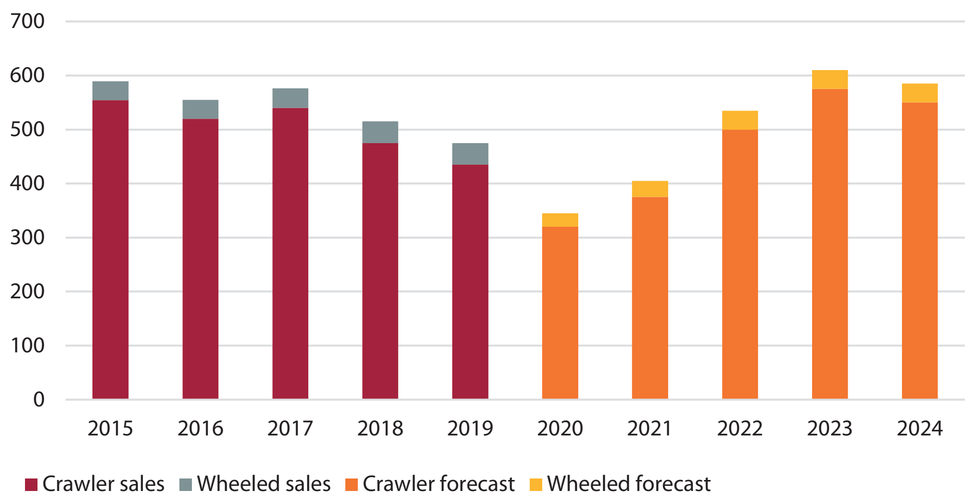
FORECAST

Table 42. Ireland: Forecast Sales of hydraulic excavators by type, 2020-2024 (units)

	2020	2021	2022	2023	2024
Crawler	320	375	500	575	550
Wheeled	25	30	35	35	35
Total	**345**	**405**	**535**	**610**	**585**

Source: Off-Highway Research

Chart 27. Ireland: Forecast Sales of hydraulic excavators by type, 2020-2024 (units)



Source: Off-Highway Research

A decline in sales of more than 25 per cent is predicted in 2020, following a five-year period of relatively buoyant demand, compounded by the effects of the pandemic. Sales volumes are then forecast to increase gradually, reaching over 600 units by 2023.

The ongoing housing shortage will necessitate the building of new houses, albeit at a lower more controlled level of activity than before. These will require the necessary infrastructure support. The long-term outlook for the crawler excavator market is favourable, but a return to the levels seen in the boom years is highly unlikely.

The wheeled excavator continues to be a relatively unaccepted product and in the absence of any major change in trend, demand will remain at low levels.

MINI EXCAVATORS

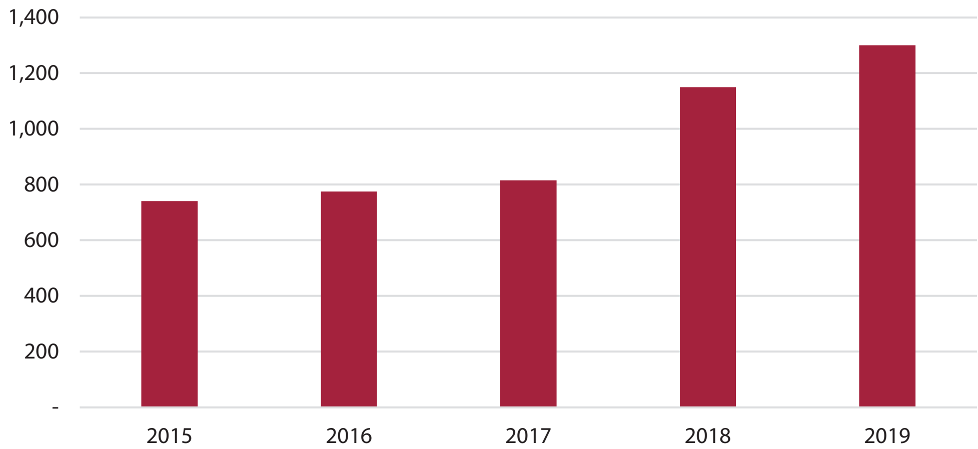
MARKET SIZE AND TRENDS

Table 43. Ireland: Sales of mini excavators, 2015-2019 (units)

2015	2016	2017	2018	2019
741	775	920	940	1,110

Source: Off-Highway Research

Chart 28. Ireland: Sales of mini excavators, 2015-2019 (units)



Source: Off-Highway Research

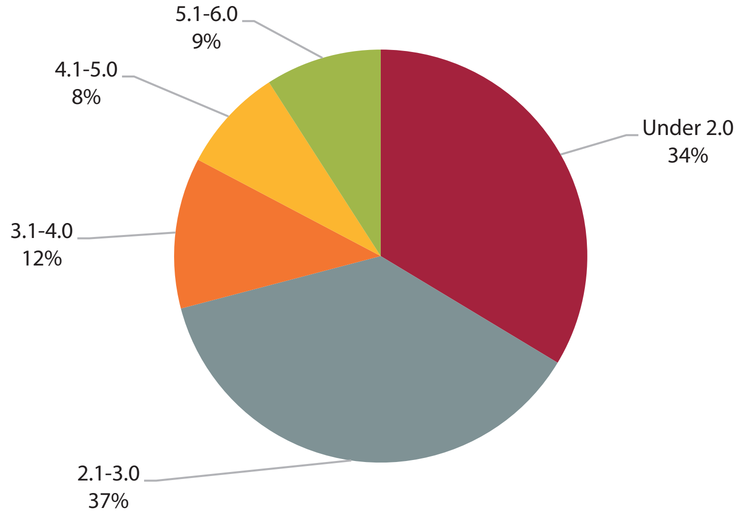
Sales of mini excavators peaked at 1,685 units in 2007. The pre-2007 boom largely resulted from a surge in new work from the utility companies, together with the expansion of the housing market. Many building contractors had recognised the advantage of using a mini excavator together with a telescopic rough terrain lift truck, instead of the traditional backhoe loader on housing estates. However, when the housing market crashed, there was little need for mini excavators, and by 2009, the market had dropped by 91 per cent, falling a further 10 per cent in 2010 to just 139 units. Sales remained at 150-250 units per year for three years until the housing market started to pick up, and public works became a more viable proposition. Demand more than doubled from 2014 to 2015, an indication of a recovery in that segment. Sales have continued to increase over the last five years, reaching 1,110 units in 2019, a level last seen in the run up to the construction boom.

Table 44. Ireland: Sales of mini excavators by weight category, 2015-2019

	2015		2016		2017		2018		2019	
	Units	%	Units	%	Units	%	Units	%	Units	%
Under 2.0	170	23	170	22	160	17	262	28	373	34
2.0 -3.0	336	45	345	45	401	44	370	39	414	37
3.1-4.0	100	13	110	14	161	18	135	14	131	12
4.1-5.0	95	13	100	13	106	12	71	8	91	8
5.1-6.0	40	5	50	6	91	10	102	11	101	9
Total	**741**	**100**	**775**	**100**	**920**	**100**	**940**	**100**	**1,110**	**100**

Source: Off-Highway Research

Chart 29. Ireland: Sales of mini excavators by weight category, 2015-2019



Source: Off-Highway Research

The market is largely focused on the under 3 tonne machine category, which accounts for over 70 per cent of total demand. Demand for machines under 2.0 tonnes has increased over the period under review and now accounts for one in every three mini excavators sold. Whilst declining from 45 per cent of total sales in 2016 to 37 per cent in 2019, the 2.0 to 3.0 tonne segment remains the most popular. These smaller capacity machines can be easily transported on a standard trailer towed by a car. They are also the size categories favoured by plant hire companies, which are the largest buyers of mini excavators.

Demand for machines between 3 and 4 tonnes peaked at 18 per cent in 2017 and has since declined to 12 per cent of sales, while overall demand for machines larger than 4.0 tonnes has also declined over the last two years, however there are indications that this trend has reversed, and sales of heavier machines are once again increasing.

MARKET SHARES

Kubota was the first supplier of mini excavators in the late 1970s, and for many years was the market leader. CMH had represented it for 35 years until the owner, Pat Murphy, retired in 2013. Whelan Plant sales now covers the west of Ireland, MP Crowley Cork Ltd. covers the south, and FJS Plant Repairs, the east. It has been market leader for the last four years, its market share having increased steadily over the course of the period under review, reaching 34 per cent in 2018 and 2019.

Yanmar's market share fell to just 5 per cent in 2015 and 2016, a far cry from the 25-27 per cent share it had enjoyed between 2009 and 2011. It was previously sold through Ammann's sales network, but after the Ammann Yanmar manufacturing joint venture was dissolved in 2016, Yanmar set up its own sales network. Following the appointment of Cork based O'Regan Plant Sales as its dealer for the Republic of

Ireland in 2018, Yanmar's market share increased to 15 per cent in 2019, moving the company into second place.

Hitachi led the market with a 26 per cent share in 2015 but has gradually lost ground over the past five years, its market share declining to 10 per cent in 2019. This period coincides with changes in dealerships, from McSharry Bros. back to TBF Thompson, which had been the Hitachi dealer prior to the closure of its Dublin premises in 2010. Given that Hitachi maintained its market leadership in hydraulic excavators during the same period, it is unlikely that the changes in dealership were the cause of the loss in market share.

Takeuchi was market leader at the peak of the building boom, as well as in 2012 and 2013, but subsequently settled into third place from 2015 through to 2017. Yanmar's recent ascent pushed Takeuchi into fourth place in 2019. BFM (Breen Farm Machinery), based in Cashel in Tipperary, is Takeuchi's dealer for Ireland.

Since Limerick-based Adare Machinery was appointed as **Bobcat**'s dealer in 2015, the company's sales have greatly improved, its market share increasing from just one per cent to eight per cent in 2019.

Table 45. Ireland: Suppliers of mini excavators and their market shares, 2015-2019, (units)

	2015		2016		2017		2018		2019	
	Units	%	Units	%	Units	%	Units	%	Units	%
Kubota	163	22	219	28	306	33	323	34	374	34
Yanmar	35	5	40	5	45	5	65	7	170	15
Hitachi	190	26	125	16	145	16	120	13	106	10
Takeuchi	80	11	80	10	95	10	115	12	100	9
Bobcat	11	1	21	3	34	4	52	6	90	8
JCB	73	10	80	10	66	7	47	5	52	5
Volvo	25	3	30	4	45	5	45	5	50	5
Kobelco	-	-	21	3	26	3	31	3	50	5
Caterpillar	50	7	45	6	48	5	48	5	47	4
Doosan	-	-	10	1	14	2	32	3	27	2
Komatsu	27	4	22	3	24	3	25	3	24	2
Case	30	4	42	5	13	1	9	1	7	1
Hyundai	14	2	6	1	4	-	4	-	2	-
New Holland	4	1	4	1	-	-	-	-	1	
Hanix	15	2	13	2	10	1	12	1	-	-
Eurocomach	3		8	1	8	1	4	-	-	-
Schaeff	-	-	-	-	27	3	-	-	-	-
Sunward	-	-	3	-	3	-	-	-	-	-
Others	21	3	6	1	7	1	8	1	10	1
Total	**741**	**100**	**775**	**100**	**920**	**100**	**940**	**100**	**1,100**	**100**

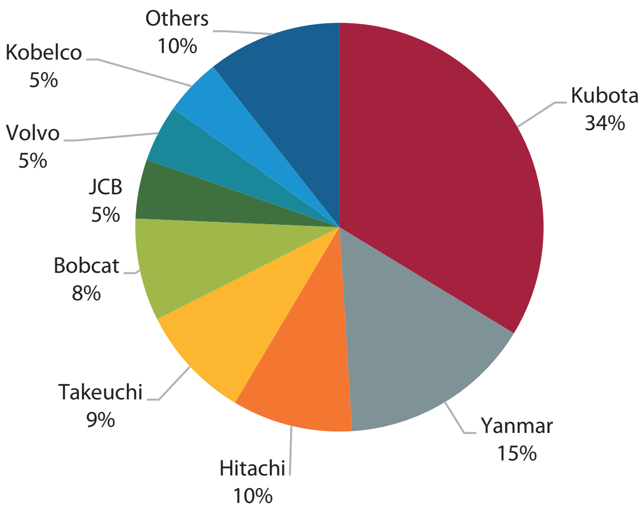
Source: Off-Highway Research

JCB's sales paint a different picture, its market share declining from 10 per cent in 2015 to five per cent in 2019, in the face of increasingly tough competition. The company is represented by ECI, which has been selling its equipment since 1984.

Volvo and **Kobelco** are the only two remaining suppliers with sales of 50 units or more. Volvo is represented by Pat O'Donnell and Co., a long-established Dublin based company, whilst Kobelco, represented by McSharry Bros. has made good progress since re-entering the market in 2013.

The remaining suppliers include **Caterpillar, Doosan, Komatsu,** and **Hyundai**, all of which are major suppliers of crawler excavators.

Chart 30. Ireland: Suppliers of mini excavators and their market shares, 2019, (units)



Source: Off-Highway Research

Table 46. Ireland: Distribution networks for mini excavators, 2020

Manufacturer	Distributor
Bobcat	Adare Machinery
Case	Jim MacAdam
Caterpillar	Finning
Doosan	EMS
Hitachi	TBF Thompson
JCB	ECI
Komatsu	McHale Plant
Kubota	Whelan Plant, MP Crowley, FJS
New Holland	PMC Plant, M&S Machinery
Takeuchi	BFM
Volvo	Pat O'Donnell
Yanmar	O'Regan Plant

Source: Off-Highway Research

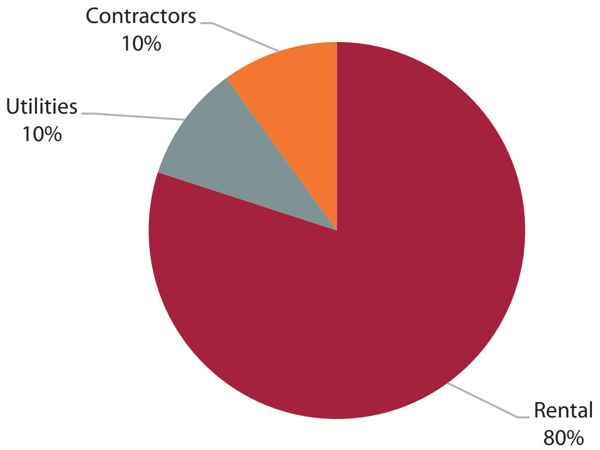
POPULATION AND END-USERS

Table 47. Ireland: Population of mini excavators by end-user, 2020

	Units	%
Rental	4,000	80
Utilities	500	10
Contractors	500	10
Total	**5,000**	**100**

Source: Off-Highway Research

Chart 31. Ireland: Population of mini excavators by end-user, 2020



Source: Off-Highway Research

Each year since the market reached its lowest level in 2010, sales of mini excavators have increased, totalling over 5,500 units in 10 years. It is thought that many of these machines will still be operating, given the low level of construction activity until 2014. It is therefore estimated that an active population of about 5,000 machines remain in the country, of which around some 4,000 units or 80 per cent are owned by plant hire companies, a further 10 per cent by contracting and demolition and the remainder divided between utilities, cabling and other companies.

The share of the population taken by the hire market varies slightly each year and improves in line with the strength of demand, for market growth is usually led by plant hire companies replenishing and expanding fleets to meet increased activity. Demolition and general contractors primarily use machines above 3.0 tonnes, but they are also used in landscaping and drainage work.

FORECAST

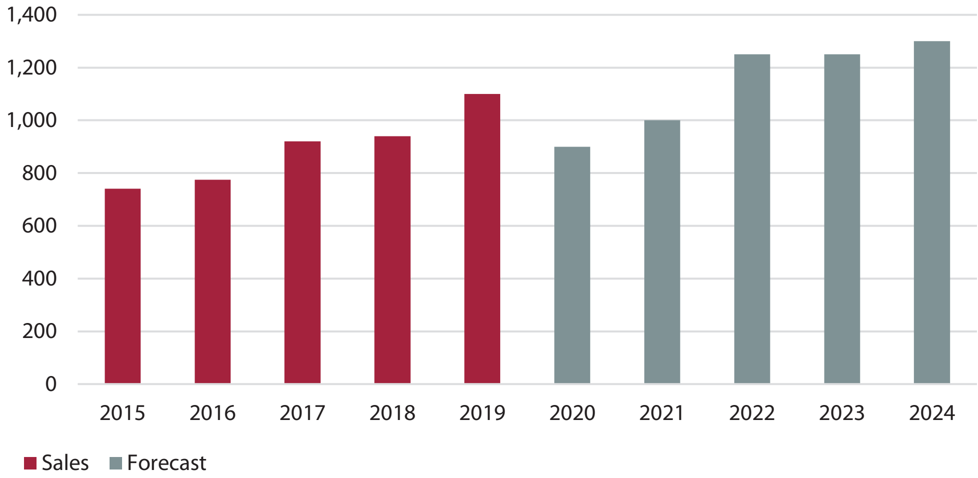
Table 48. Ireland: Forecast sales of mini excavators, 2020-2024 (units)

2020	2021	2022	2023	2024
900	1,000	1,250	1,250	1,300

Source: Off-Highway Research

As with most product types, there will be an inevitable slowdown this year, as a result of a correction after such a sustained growth in sales, combined with the impact of the coronavirus pandemic. After that, however, ongoing demand from rental customers and the still-growing appreciation of the usefulness of these machines should see a gradual growth to 1,300 units by 2024.

Chart 32. Ireland: Forecast sales of mini excavators, 2020-2024 (units)



Source: Off-Highway Research

MOBILE CRANES

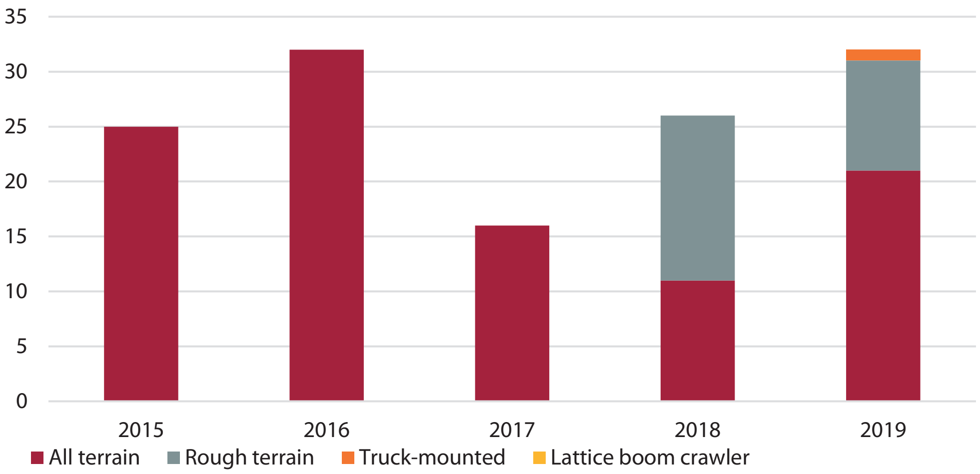
MARKET SIZE AND TRENDS

Table 49. Ireland: Sales of mobile cranes by type, 2015-2019 (units)

	2015	2016	2017	2018	2019
All terrain	25	32	16	11	21
Rough terrain	-	-	-	15	10
Truck-mounted	-	-	-	-	1
Lattice boom crawler	-	-	-	-	-
Total	**25**	**32**	**16**	**26**	**32**

Source: Off-Highway Research

Chart 33. Ireland: Sales of mobile cranes by type, 2015-2019 (units)



Source: Off-Highway Research

During the construction boom before the slump of 2008, the mobile crane market reached up to 50 units, as the major crane rental companies replaced and upgraded their fleets, but the subsequent downturn in construction activity meant that purchases of cranes ground to an abrupt halt in 2011. There then followed a period during which there was a general reduction in the size of the crane hire fleet, as machines were sold to forestall any potential closures. 2015 and 2016 saw a major increase in demand, as hire companies renewed and expanded their fleets once again to meet the demand of the general increase in the building sector. Sales were more subdued the following two years, before recovering again in 2019.

Table 50. Ireland: Sales of all terrain cranes by lift capacity, 2016, 2019

	2016		2019	
Tonnes	**Units**	**%**	**Units**	**%**
30.0-65.9	10	31	9	43
66.0-80.9	3	9	7	33
81.0-110.9	7	22	1	5
111.0-139.9	7	22	-	-
140.0-199.9	-	-	2	10
200.0-299.9	3	9	1	5
300.0-399.9	1	3	-	-
Over 400	1	3	1	5
Total	**32**	**100**	**21**	**100**

Source: Off-Highway Research

The **all-terrain** model continues to dominate crane purchases. The most popular models are the three and four axel machines, typically 50 to 80 tonnes, which accounted for 40 per cent of sales in 2016, increasing to 76 per cent in 2019. These are the preferred choice of rental companies, which are by far the largest purchasers of mobile cranes. More recently, much larger machines have been sold, including a 750 tonne LTM1750-9.1 in March 2018. This trend has continued in 2020, with approximately half of the cranes sold up to October being in excess of 130 tonnes. These larger cranes are primarily used for the installation and maintenance of wind turbines.

The former dominance of the **truck-mounted** crane has diminished rapidly in recent years. Prior to the economic downturn, a small number of machines with a capacity of between 20 and 50 tonnes were sold, however very few have been sold in the last five years.

In contrast, there has been a resurgence of the **rough terrain** crane market, with 15 units sold in 2018 and a further 10 units in 2019. These have been spread across a range of sizes up to 35 tonnes, but more recently include two heavy lift capacity models of 100 tonnes. Until recently the market had been served by both Grove and Terex, however Liebherr clearly identified a growing popularity of the high-capacity rough terrain crane, launching new 90 tonne and 100 tonne models in 2017 following a 30-year absence from the rough terrain market. 2020 has seen a slowing down of this demand. Rough terrain cranes can be used for a wide variety of applications from general construction to the energy sector.

Demand for **crawler cranes** is only occasional and related to specific projects. Prior to the recession, a small number were sold into the Irish market however few sales have been recorded in the past five years. Should a crawler crane be required, it is generally brought in from one of the larger hire companies in the UK, such as Weldex.

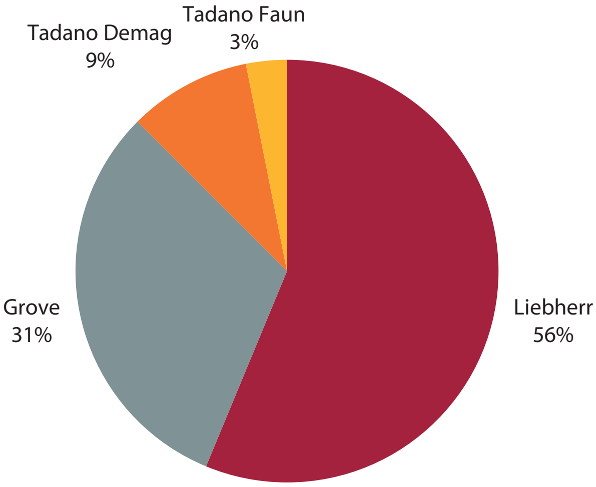
MARKET SHARES

Table 51. Ireland: Suppliers of Mobile Cranes and Their Market Shares, 2013, 2017, 2019

	2015		2016		2017		2018		2019	
	Units	%	Units	%	Units	%	Units	%	Units	%
Liebherr	13	52	17	53	8	50	9	35	18	56
Grove	5	20	8	25	4	25	13	50	10	31
Tadano Demag	-	-	-	-	-	-	-	-	3	9
Tadano Faun	-	-	1	3	2	13	2	8	1	3
Terex	7	28	6	19	2	13	1	4	-	-
Kato	-	-	--	-	-	-	1	4	-	-
Total	**25**	**100**	**32**	**100**	**16**	**100**	**26**	**100**	**32**	**100**

* The Demag business was sold by Terex to Tadano on 1st August 2019
Source: Off-Highway Research

Chart 34. Suppliers of Mobile Cranes and Their Market Shares, 2019



Source: Off-Highway Research

Liebherr has become the strongest supplier in the country, commanding generally in excess of a 50 per cent share. The decrease in its overall market share in 2018 was caused by the relatively large number of rough terrain cranes sold, prior to Liebherr re-entering this market sector. Its product has a reputation for high quality and specification and has traditionally commanded a premium price. The company markets a comprehensive range of all terrain cranes and is strongest in the high lift capacity sector of the market. Many hire companies believe Liebherr's combination of price, quality, technical excellence and after sales support is a package that is unmatched by any other supplier in the market.

Following a decline in market share a number of years ago, due to constant corporate changes, and following the appointment of Irlequp as its dealer in Ireland, **Grove** has returned to second place, also helped by the surge in demand for all terrain cranes.

Tadano Faun GmbH, a wholly owned subsidiary of Tadano Faun, acquired its sales and service distributor in the UK and Ireland, Cranes UK Ltd, based in South Yorkshire in 2014. Following its acquisition of **Terex Demag** in 2019, Tadano announced that it would be moving from Yorkshire base to Demag's UK facility in Long Crendon, near Oxford. In 2021, **Tadano Demag** will be absorbed into Tadano UK Ltd. and Tadano UK will be the sole representation of the Tadano and Demag brands in the UK and Ireland.

The Demag brand had built upon the small population of PPM cranes that were previously sold in the country but had suffered somewhat when the Demag brand had been subsumed into Terex. With the return of the Demag name, sales followed suit. Tadano Faun has maintained a small but steady market presence.

Kato Cranes, represented by Rivertek Services in Co. Cork, remains a small player. It most recently sold a 13 tonne City Crane to East Cork Crane Hire.

Table 52. Ireland: Distribution networks for mobile cranes, 2020

Manufacturer	Distributor
Grove	Irlequip
Kato	Rivertek Services
Liebherr	Liebherr Ireland
Tadano	Tadano UK

Source: Off-Highway Research

POPULATION AND END-USERS

Besides the absence of official statistics covering the population if machines, calculating the population is difficult because most companies do not keep accurate records, and second-hand machines are regularly imported and exported. The 'normal' population i.e., in neither a boom nor a bust period, the population is estimated at around 250 units. This would have increased to closer 300 units during the buoyant years between 2004 and 2007 when the trade in new and nearly new machines was very active. The subsequent market collapse resulted in the export of many machines, causing the population to decline to between 200 and 225 machines. The majority of cranes purchased since then have been to replace ageing equipment rather than to increase the size of the fleet, therefore it is estimated that the population has remained at no more than 220 cranes.

The major purchaser of new cranes remains the crane hire sector. Its dominance of the market has grown steadily and now accounts for over 90 per cent of all sales. The growing trend towards fewer and larger participants is viewed as favourable in the long term as it makes for a more viable industry. There is a body of opinion within the industry which believes that ultimately all cranes will be sold into the hire sector and previous buyers of cranes, such as contractors and public utilities prefer to undertake long term agreements rather than purchase outright, though they will do so if a contract is of sufficient duration to enable the cost of a new machine to be offset.

The larger hire companies in Ireland include Kavanagh Crane Hire, Crane Hire Ltd., and William O'Brien.

FORECAST

The mobile crane market is expected to decline to around 18 units in 2020 due to the impact of the coronavirus, before recovering to reach 26 units in 2021. It is believed that replacement demand will boost sales to reach 30 units by 2022, before the market stabilises at about 25 units by 2024, a level which is both sustainable and reasonable.

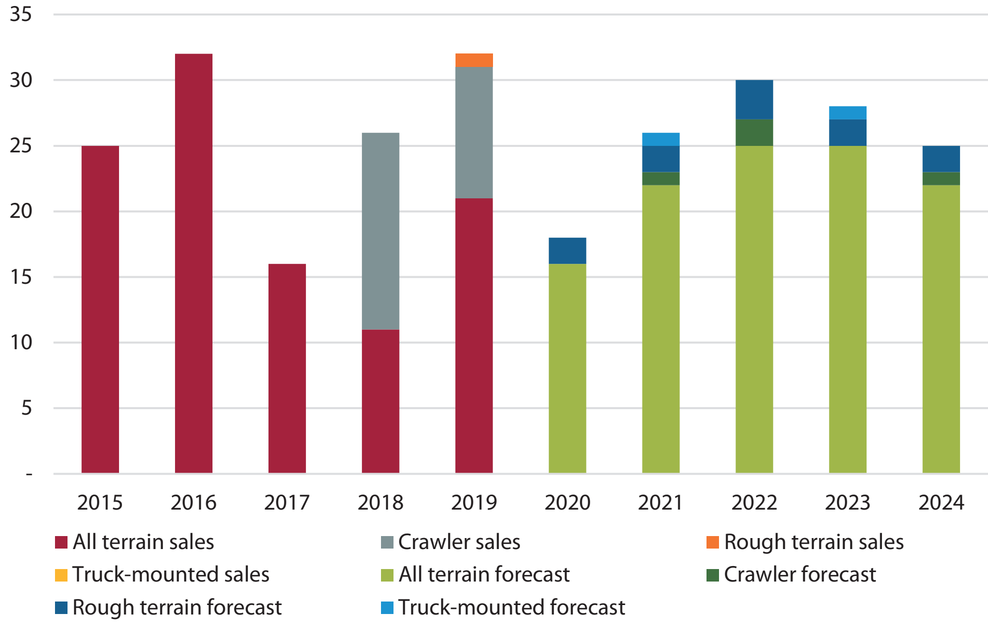
All terrains will almost certainly continue to dominate, supplemented by occasional sales of truck mounted machines, rough terrain cranes and crawler cranes.

Table 53. Ireland: Forecast sales of mobile cranes by type, 2020-2024 (units)

	2020	2021	2022	2023	2024
All terrain	16	22	25	25	22
Rough terrain	2	2	3	2	2
Lattice boom crawler	-	1	2	-	1
Truck-mounted	-	1	-	1	-
Total	**18**	**26**	**30**	**28**	**25**

Source: Off-Highway Research

Chart 35. Ireland: Forecast sales of mobile cranes by type, 2020-2024 (units)



Source: Off-Highway Research

MOTOR GRADERS

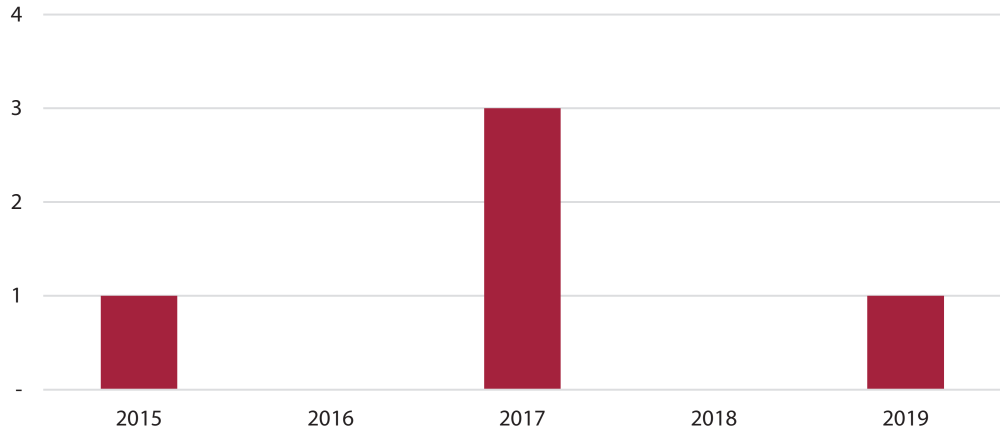
MARKET SIZE AND TRENDS

Table 54. Ireland: Sales of motor graders, 2015-2019 (units)

2015	2016	2017	2018	2019
1	-	3	-	1

Source: Off-Highway Research

Chart 36. Ireland: Sales of motor graders, 2015-2019 (units)



Source: Off-Highway Research

The market for motor graders was traditionally a very small market, with the occasional sale of just one or two units. Then, in 2007 the market exploded, with demand reaching 15 units. Given the subsequent economic crash, combined with the longevity of these machines, there ensued a period of eight years of negative demand. Contractors were quite reluctant to spend money on what they regarded as a non-productive machine and often used other machines to carry out a grader's duties, namely a crawler dozer, or in extreme cases, a wheeled loader. Eventually an extremely low level of sales returned, with just five machines sold in the period under review.

MARKET SHARES

Table 55. Ireland: Sales of motor graders by supplier, 2015-2019 (units)

	2015		2016		2017		2018		2019	
	Units	%	Units	%	Units	%	Units	%	Units	%
HBM-Nobas	1	100	-	-	2	67	-	-	1	100
Caterpillar	-	-	-	-	1	33	-	-	-	-
Total	**1**	**100**	**-**	**-**	**3**	**100**	**-**	**-**	**1**	**100**

Source: Off-Highway Research

Market shares are largely irrelevant in such a small market, where the sale of one machine can have a major impact. That said, HBM-Nobas has sold four of the five machines which have been purchased over the last five years. The previously mentioned large number sold in 2007 were Caterpillar's success.

Table 58. Ireland: Distribution networks for motor graders, 2020

Manufacturer	Distributor
Caterpillar	Finning
HBM-Nobas	Dave Power Plant (Cork)

Source: Off-Highway Research

HBM-Nobas was responsible for 60 per cent of these sales, with Caterpillar selling the remaining two models. The majority of machines sold are in the 140 to 200 horsepower range.

The government is committed to maintaining and improving the highway infrastructure and this, together with local authority funds for road repairs, should encourage those contractors with machines to continue their limited replacement programme, which in turn one would expect to lead to a modest level of sales of new machines.

POPULATION AND END-USERS

The large volume of machines purchased in 2007 is estimated to have increased the population of motor graders to almost 40 units, which was more than adequate for the needs of the market. Not all of these machines were purchased new, for some second-hand units were imported from the UK. In the ensuing downturn, some of these machines may have been exported. The average life of a motor grader is estimated at between 12 and 18 years, with annual utilisation being between 900 and 1,500 hours, therefore many of the remaining machines will be reaching the end of their life. Taking into consideration the low level of replacement, it is therefore estimated that the active population has fallen to around 30 units.

Earthmoving contractors are the primary owners of the graders that have been sold in the recent past.

FORECAST

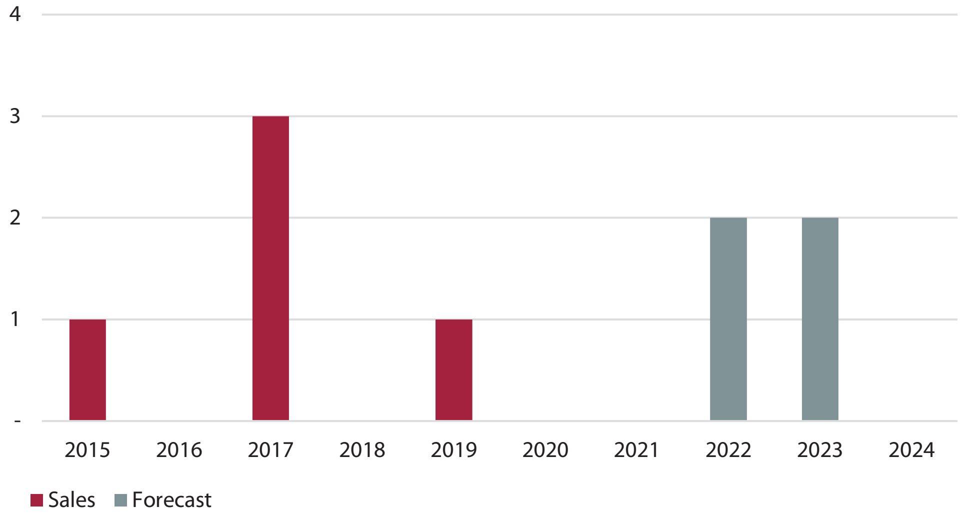
As some of the oldest models reach the end of their active life, a low level of replacement is predicted to ensue in 2022 and 2023. This, combined with the general low level usage of graders, will probably result in very few sales over the next few years.

Table 56. Ireland: Forecast sales of motor graders, 2020-2024 (units)

2020	2021	2022	2023	2024
-	-	2	2	-

Source: Off-Highway Research

Chart 37. Ireland: Forecast sales of motor graders, 2020-2024 (units)



Source: Off-Highway Research

ROUGH TERRAIN LIFT TRUCKS

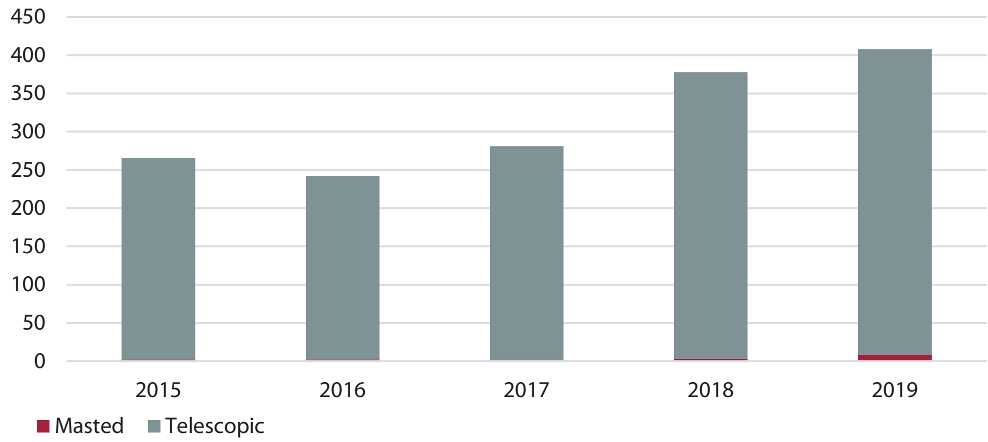
MARKET SIZE AND TRENDS

Table 57. Ireland: Sales of rough terrain lift trucks by type, 2015-2019 (units)

	2015	2016	2017	2018	2019
Masted	2	2	1	3	8
Telescopic	264	240	280	375	400
Total	**266**	**242**	**281**	**378**	**408**

Source: Off-Highway Research

Chart 38. Ireland: Sales of rough terrain lift trucks by type, 2015-2019 (units)



Source: Off-Highway Research

In common with most, the market for rough terrain lift trucks in Ireland is dominated by the telescopic handler, which generally accounts for 99 per cent of sales, with rigid machines achieving just a few sales each year. Success in the recent past saw sales reach over 1,000 units in 2006, but falling sharply in 2008, before the market bottomed out at just 76 units by 2010. It has recovered well and accounted for 17 per cent of total equipment sales in Ireland in 2019.

The telescopic rough terrain lift truck is one of the few types of equipment that is widely used in both the construction and the agricultural sectors, and this has held it in good stead when demand from construction sector has been at a low ebb. Sales were initially boosted by the housing boom, with the agricultural sector contributing only a small part to sales volumes. By the turn of the century, the opposite was true, with 80 per cent of all sales of telescopic rough terrain lift trucks destined for the agricultural sector. Inevitably, demand swung in favour of the construction sector during the boom period before the crisis reversed the trend. In the current market, the construction sector accounts for 70 - 80 per cent of sales.

The construction sector had drastically overheated in the period between 2005 and 2009. When comparing Ireland to the UK, itself a major telehandler market, sales in Ireland were averaging between 15 and 20 per cent of the level in the UK during the boom period. This, in a country whose population is only 6 per cent of that of the

UK's. This would suggest that annual demand should have been around 300 to 500 units and consequently, when the correction came it was deep and severely impacted all suppliers. From a low point of just 71 units in 2010, the market has made a gradual recovery, reaching 400 units in 2019.

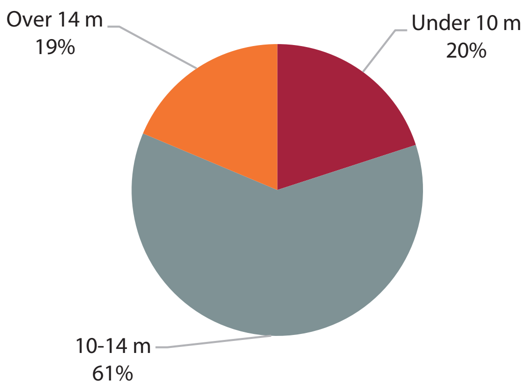
Construction and industrial customers require a variety of telescopic machines, while rental companies tend to purchase a machine of 3.0 tonnes with a maximum reach of 12-16 metres. In the past the building sector favoured machines with a weight capacity of 3-4 tonnes, and a lift of 12-13 metres, but is now purchasing more higher lift capacity machines, up to 17 metres. The increased lift enables the builder to use his rough terrain lift truck to lift roof trusts onto buildings. A lift of 7-8 metres is generally sufficient for the agricultural market.

Table 58. Ireland: Sales of telescopic rough terrain lift trucks by lift height, 1997-2019

	1997		2001		2007		2013		2019	
	Units	%	Units	%	Units	%	Units	%	Units	%
Under 10 m	60	13	85	10	100	11	104	65	80	20
10-14 m	400	84	595	70	600	67	32	20	245	61
Over 14 m	15	3	170	20	200	22	24	15	75	19
Total	**475**	**100**	**850**	**100**	**900**	**100**	**160**	**100**	**400**	**100**

Source: Off-Highway Research

Chart 39. Ireland: Sales of telescopic rough terrain lift trucks by lift height, 2015-2019



Source: Off-Highway Research

The masted machine has limited appeal and is only used in niche markets. Sales previously averaged at just 10-15 units per year, although 2007 saw a sharp temporary increase, but sales now average at just a few units per year.

MARKET SHARES

JCB has been the clear market leader since 2006, although its lead was somewhat reduced in 2019. It has been very strong in selling to both the agricultural and the construction sector. The company's success is affected by swings in exchange rates, as its nearest competitor, **Manitou**, has the advantage of billing in Euros, whereas

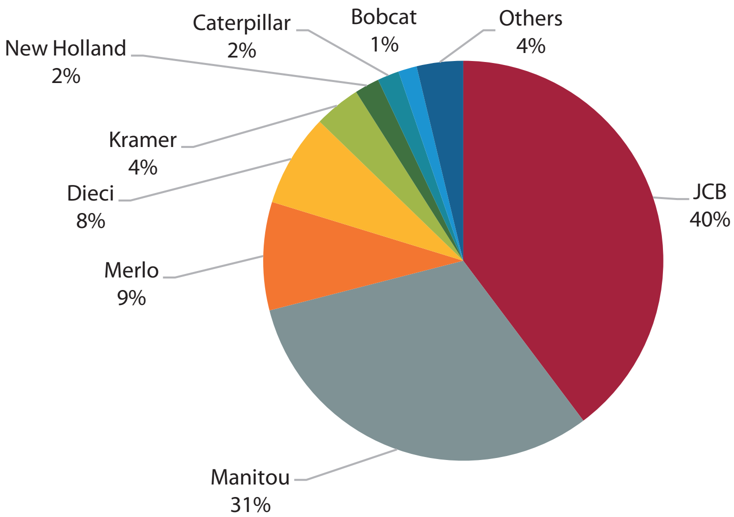
JCB is reliant upon the fortunes of the pound sterling. The sales of these two suppliers regularly account for around 80 per cent of the market, but dipped to 71 per cent in 2019, with several smaller competitors gaining ground.

Table 59. Ireland: Suppliers of telescopic rough terrain lift trucks and their market share, 2015-2019 (units)

	2015		2016		2017		2018		2019	
	Units	%	Units	%	Units	%	Units	%	Units	%
JCB	137	52	128	53	146	52	185	53	159	40
Manitou	85	32	67	28	83	30	95	27	125	31
Merlo	12	5	14	6	15	5	18	5	35	9
Dieci	12	5	13	5	18	6	20	6	30	8
Kramer	-	-	-	-	-	-	26	7	15	4
New Holland	-	-	-	-	-	-	8	2	8	2
Caterpillar	6	2	4	2	5	2	5	1	7	2
Bobcat	2	1	3	1	3	1	14	4	6	2
JLG	9	3	9	4	5	2	3	1	6	2
Faresin	1		-	-	2	1	-	-	1	
Massey Ferguson	-	-	-	-	2	1	-	-	-	-
Others	-	-	2	1	1		1	-	8	2
Total	**264**	**100**	**240**	**100**	**280**	**100**	**375**	**100**	**400**	**100**

Source: Off-Highway Research

Chart 40. Ireland: Sales of telescopic rough terrain lift trucks by supplier, 2019 (units)



Source: Off-Highway Research

Merlo has almost doubled its market share over the last five years, from 5 per cent in 2015 to 9 per cent in 2019. Its telescopic handlers are sold by McHale Plant which has strong ties in the agricultural as well as the construction sector.

Dieci has also experienced a growth in market share, increasing from 5 per cent to 8 per cent over the last five years. Its UK operations are controlled by a dealer located a few miles over the Northern Ireland border, in Newry. The company is very strong in the agricultural sector as well as having a competitively priced product for the construction market.

Kramer, hitherto relatively unknown in Ireland, moved into fourth place in 2018, selling 26 units and thereby gaining a 7 per cent market share, subsequently dropping to fifth place in 2019. Following the ending of its collaboration on agricultural tractors with Claas, it has clearly benefitted from the move to sell the brand through John Deere's network of agricultural dealers.

The remaining suppliers make up less than 10 per cent of the market. These include New Holland, which returned to the market in 2018 after a period of absence, and Caterpillar, which has traditionally been more active in the construction sector than the agricultural sector.

Table 60. Ireland: Distribution networks for rough terrain lift trucks, 2020

Manufacturer	Distributor
Caterpillar	Finning Ireland Ltd.
Dieci	Dieci Ltd
Bobcat	EMS, Adare Machinery
Faresin	WAC McCandless
JCB	ECI
JLG	Direct
Kramer	Via John Deere dealer network
Manitou	3 independent dealers
Merlo	McHale Plant
New Holland	M & S Machinery

Source: Off-Highway Research

POPULATION AND END-USERS

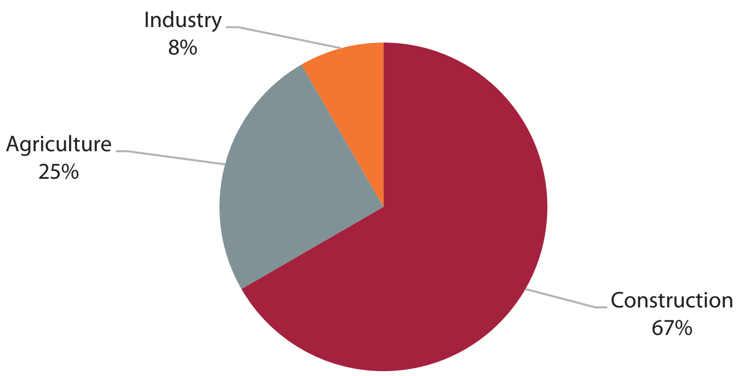
Sales of rough terrain lift trucks reached saturation during the housing boom. Thereafter, the leading suppliers turned to the agricultural sector in an attempt to compensate for the sales lost when the construction sector crashed. With the gradual recovery of the construction sector over the last five years, the emphasis has once again swung in its favour. It is estimated that there is an active population of some 3,000 machines, of which 65 per cent or 1,950 machines are found in the construction sector, a further 800 or 27 per cent are found in the agricultural sector, and the remaining 250 units in industry.

Table 61. Ireland: Population of rough terrain lift trucks by end user, 2020

	Units	%
Construction	1,950	65
Agriculture	800	27
Industry	250	8
Total	**3,000**	**100**

Source: Off-Highway Research

Chart 41. Ireland: Population of rough terrain lift trucks by end user, 2020 by end-user, 2020



Source: Off-Highway Research

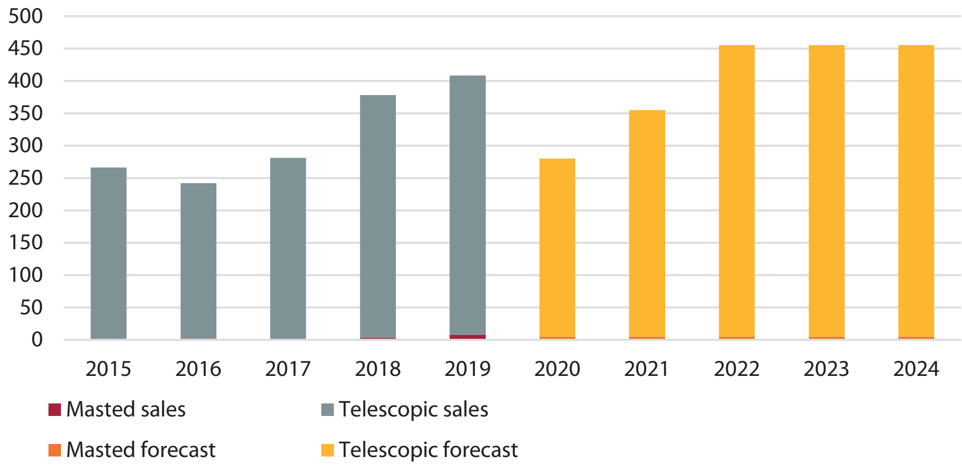
FORECAST

Table 62. Ireland: Forecast Sales of rough terrain lift trucks by type, 2020-2024 (units)

	2020	2021	2022	2023	2024
Masted	5	5	5	5	5
Telescopic	275	350	450	450	450
Total	**280**	**355**	**455**	**455**	**455**

Source: Off-Highway Research

Chart 42. Ireland: Forecast Sales of rough terrain lift trucks by type, 2020-2024 (units)



Source: Off-Highway Research

Following a 30 per cent decline in sales in 2020 due to the cessation of building works during the initial lockdown period, demand is predicted to start its recovery in 2021, and reach 455 units by 2022.

The masted market is small and very mature. There is little likelihood any major increase in sales in the future as none of the suppliers actively market the product.

SKID-STEER LOADERS

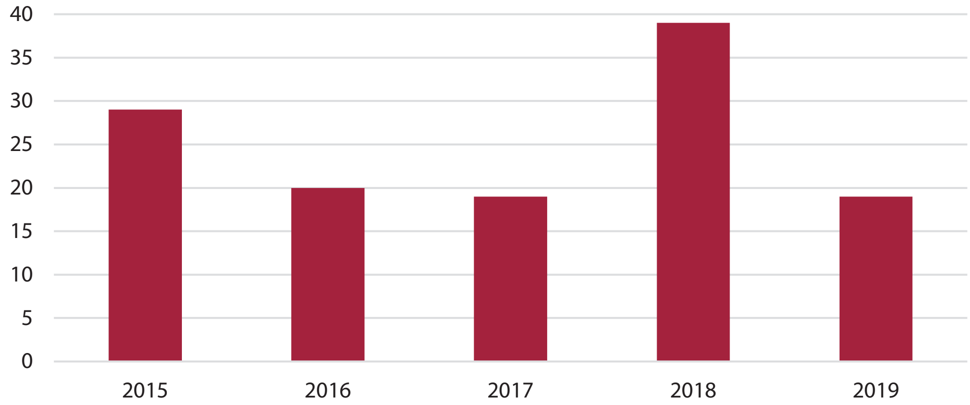
MARKET SIZE AND TRENDS

Table 63. Ireland: Sales of skid-steer loaders, 2015-2019 (units)

2015	2016	2017	2018	2019
29	20	19	37	19

Source: Off-Highway Research

Chart 43. Ireland: Sales of skid-steer loaders, 2015-2019 (units)



Source: Off-Highway Research

The market for skid-steer loaders was slow to take off in Ireland, and no sooner had this equipment started to gain acceptance, when the economy crashed. This meant that the skid-steer loader all but disappeared with sales falling to just five units in 2011. Thereafter, the market stabilised at a relatively low level of around 20 units, until 2018, reaching a maximum of 37 units in 2018.

Whilst the skid-steer loader found favour in many countries in the agricultural sector, the telescopic rough terrain lift truck has been the preferred alternative in Ireland. It should be realised however, that the lack of knowledge regarding the product has been the biggest barrier to the skid-steer loader's development. Until recently, it was not aggressively marketed by any particular supplier, and the achievable volumes made it difficult for any dealer to commit the necessary resources needed to educate the market as to the real benefits of the product.

The most popular size of skid-steer loader was traditionally the 600-700 kilogramme machine, until the introduction of tier IV engines increased the operating capacity of all machines. This resulted in a growing demand, particularly from the rental sector, for larger, over 700-kilogramm capacity machines in recent years.

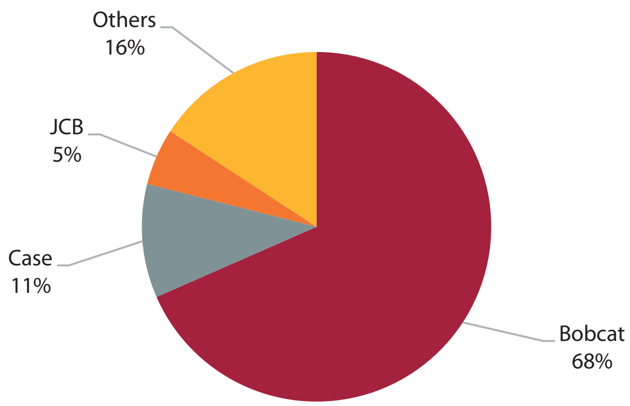
MARKET SHARES

Table 64. Ireland: Suppliers of skid-steer loaders and their market shares, 2015-2019 (units)

	2015		2016		2017		2018		2019	
	Units	%	Units	%	Units	%	Units	%	Units	%
Bobcat	7	24	7	35	12	63	21	57	13	68
Case	5	17	2	10	1	5	1	3	2	11
JCB	-	-	1	5	2	11	1	3	1	5
Caterpillar	1	3	-	-	-	-	-	-	-	-
Gehl	3	10	-	-	-	-	-	-	-	-
New Holland	12	41	9	45	3	16	13	35	-	-
Others	1	3	1	5	1	5	1	3	3	16
Total	**29**	**100**	**20**	**100**	**19**	**100**	**37**	**100**	**19**	**100**

Source: Off-Highway Research

Chart 44. Ireland: Sales of skid-steer loaders by supplier, 2019 (units)



Source: Off-Highway Research

The volumes in this product sector are so small that an individual company's market share can change significantly by selling only a few additional machines in any year. Until 2018, only two companies, Bobcat and New Holland, had ever achieved significant volumes in the recent past.

Bobcat, the current market leader, was one of the pioneers in selling skid-steer loaders in Ireland and its share has fluctuated over the years, but its dominance in the sector has remained constant. In many instances the Bobcat name has become the generic name for a skid-steer loader, giving the company a distinct advantage over its competitors. Since 2015 it has been represented by Adare Machinery, based in County Limerick.

Case and sister company **New Holland** have traditionally been the two leading competitors behind Bobcat, enjoying relatively high market shares in this small market. CNH's decision to use Case as its construction brand and New Holland as its agricultural brand may have lessened their appeal as both sectors are very important within the skid-steer loader market and both brands could no longer compete in both sectors. In 2015, the combined sales of the two brands accounted for 59 per cent of the market. By 2017, their combined shares had fallen to 21 per cent.

JCB was a relatively late entrant to the skid-steer loader market. It has an extensive product offering with a customer base in both the construction and agricultural markets, however it does not market the skid-steer loader as aggressively or as directly as some other products in its range. Any sales success is generally a reflection of JCB's achievements in marketing its other main product lines.

Caterpillar has failed to sell any skid-steer loaders since 2015. Its relative weakness in the agricultural sector does limit its ability to be a significant player in this market.

Table 65. Ireland: Distribution networks for skid-steer loaders, 2020

Manufacturer	Distributor
Bobcat	Adare Machinery
Case	Jim MacAdam
Caterpillar	Finning
Gehl	EMS
JCB	ECI
Komatsu	McHale Plant
New Holland	P McCormick Plant; M&S Machinery

Source: Off-Highway Research

POPULATION AND END-USERS

The skid-steer loader is a niche product with a low volume of sales. As demand grew, an average life of around five years became the norm for the product. This would suggest that sales over the last 10 years would equate to the working population. As a result of sales of up to 170 units per annum in the boom years, the population had grown to 1,000 units by 2010, however the collapse in demand combined with the low level of sales in recent years has seen that population decline by more than 50 per cent to between 400 and 500 units.

The product is sold to a diverse number of customers, with agriculture, landscaping, industry and ship trimming in the east coast ports of the country all being important end-uses.

FORECAST

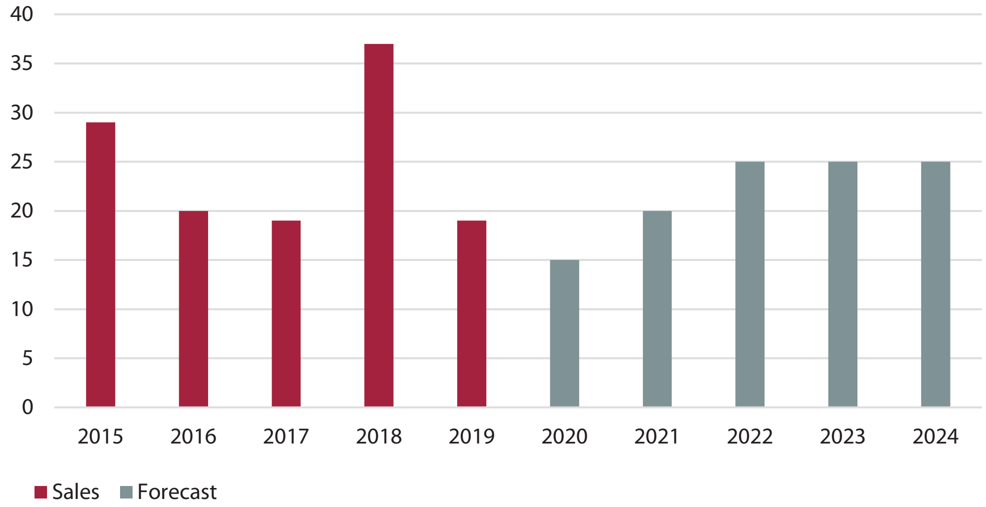
Table 66. Ireland: Forecast sales of skid-steer loaders, 2020-2024 (units)

2020	2021	2022	2023	2024
15	20	25	25	25

Source: Off-Highway Research

A return to the high levels of sales experienced in 2005-2007 is very unlikely. Demand is estimated to decline to 15 units in 2020, before gradually increasing to 25 units where it is predicted to remain for the foreseeable future.

Chart 45. Ireland: Forecast sales of skid-steer loaders, 2020-2024 (units)



Source: Off-Highway Research

WHEELED LOADERS

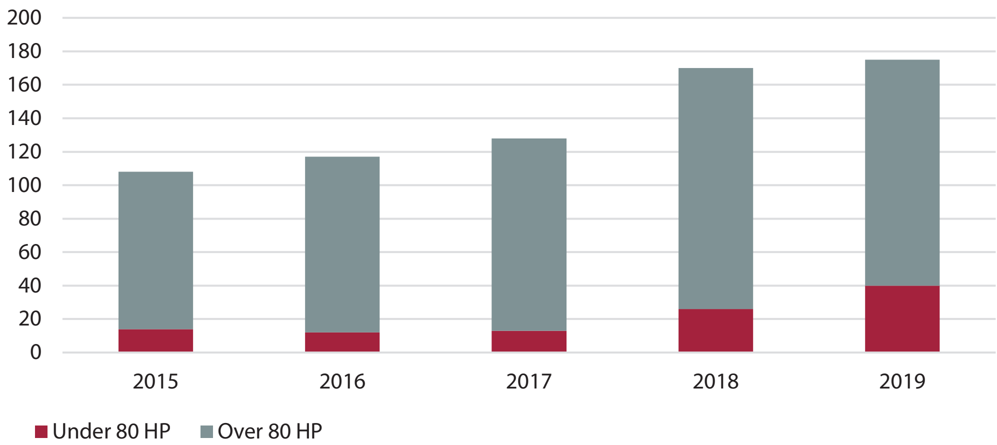
MARKET SIZE AND TRENDS

Table 67. Ireland: Sales of wheeled loaders by horsepower, 2015-2019 (units)

	2015	2016	2017	2018	2019
Under 80 HP	14	12	13	26	40
Over 80 HP	94	105	115	144	135
Total	**108**	**117**	**128**	**170**	**175**

Source: Off-Highway Research

Chart 46. Ireland: Sales of wheeled loaders by horsepower, 2015-2019 (units)



Source: Off-Highway Research

The wheeled loader market is comparatively small in Ireland, accounting for just 7 per cent of total equipment sales in 2019. That said, this represents a 2 per cent increase over the last five years as the product gains popularity.

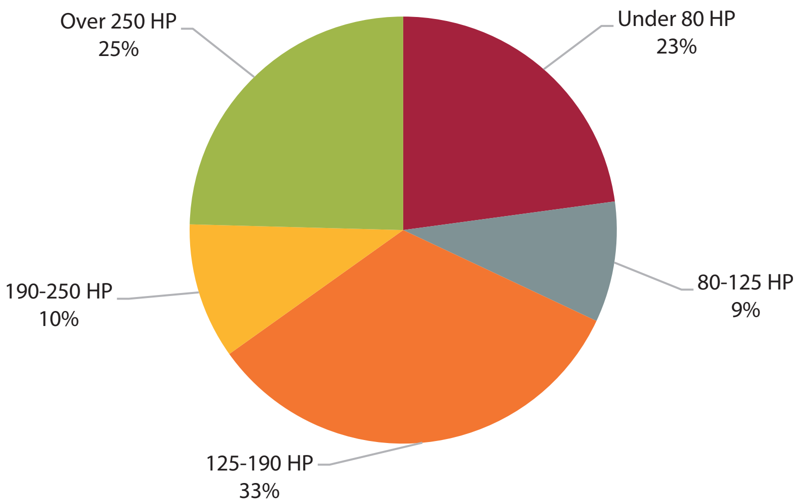
In common with many markets throughout Europe, subtle changes are taking place and the structure of demand is changing. Demand for wheeled loaders under 80 horsepower has increased from just 13 units, corresponding to 10 per cent of wheeled loader sales in 2017 to reach 40 units in 2019, the highest level since 1997 and equivalent to 23 per cent of total wheeled loader sales.

Table 68. Ireland: Sales of wheeled loaders by horsepower category, 2015-2019

	2015		2016		2017		2018		2019	
	Units	%	Units	%	Units	%	Units	%	Units	%
Under 80 HP	14	13	12	10	13	10	26	15	40	23
80-125 HP	20	19	20	17	3	17	6	4	16	9
125-190 HP	32	30	50	43	50	43	78	46	58	33
190-250 HP	20	19	12	10	9	10	8	5	18	10
Over 250 HP	22	20	23	20	53	20	52	31	43	25
Total	**108**	**100**	**117**	**100**	**128**	**100**	**170**	**100**	**175**	**100**

Source: Off-Highway Research

Chart 47. Ireland: Sales of wheeled loaders by horsepower category, 2019



Source: Off-Highway Research

Compact machines are primarily used by municipalities, the agricultural and gardening sectors and more recently in the rental sector. The best-selling under 80 horsepower machines are those with power outputs from 60-80 horsepower. Anecdotal evidence suggests it is in the under 50 horsepower market, and therefore largely outside the scope of this report, where the biggest volumes truly lie.

However, the main volume market for earthmoving and construction-related activities still lies in larger machines, primarily between 120 and 200 horsepower. Combined, these segments accounted for 34 per cent of sales in 2019, compared with 44 per cent the previous year. Demand for wheeled loaders between 200 and 300 horsepower has remained steady at 23 per cent of total sales. Machines in this size category are primarily used in quarrying, but also in some farming applications as well as the rapidly growing recycling and waste management sector.

MARKET SHARES

The wheeled loader market is one of the more mature and competitive sectors, with over 10 suppliers. Three companies traditionally dominate the sector, **JCB**, **Volvo** and **Caterpillar**, although this domination has been somewhat eroded in recent times. As recently as 2014, the three companies combined market shares reached 74 per cent, but these declined to 56 per cent in 2019.

In 2019, **JCB** attained market leadership for the first time since 2009, albeit selling just one unit more than its nearest rival. Its market share has steadily increased during the period under review, from 16 per cent in 2015 to 21 per cent in 2019.

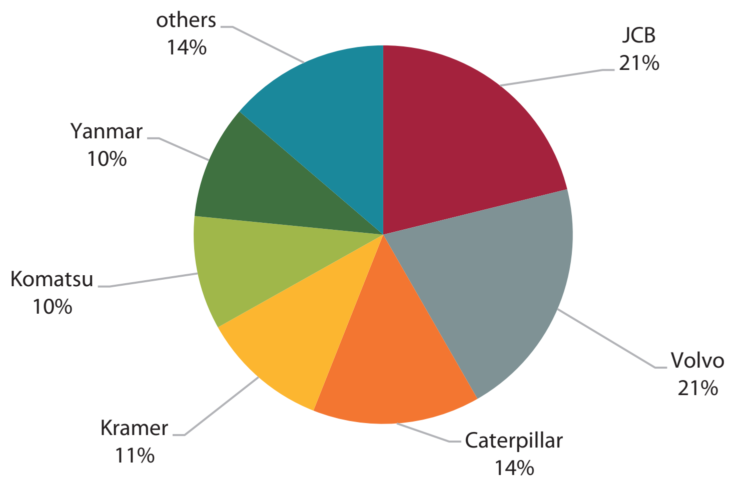
With the exception of 2019, **Volvo** has maintained market leadership since 2010 as the growth towards medium and large horsepower machines favours its product line. **Caterpillar** having lost market share from 29 per cent in 2004 to just 7 per cent in 2015, has made a good recovery since that point, gaining a 14 per cent share by 2019.

Table 69. Ireland: Suppliers of wheeled loaders and their market shares, 2015-2019, (units)

	2015		2016		2017		2018		2019	
	Units	%	Units	%	Units	%	Units	%	Units	%
JCB	17	16	21	18	30	23	41	24	37	21
Volvo	44	41	45	38	43	34	48	28	36	21
Caterpillar	8	7	9	8	18	14	24	14	25	14
Kramer	4	4	6	5	1	1	13	8	19	11
Komatsu	10	9	15	13	12	9	6	4	17	10
Yanmar	-	-	-	-	-	-	10	6	17	10
Atlas Weyhausen	1	1	-	-	3	2	2	1	6	3
New Holland	4	4	4	3	4	3	8	5	6	3
Liebherr	3	3	3	3	4	3	4	2	5	3
Kubota	-	-	1	1	2	2	3	2	4	2
Case	5	5	2	2	2	2	2	1	1	1
Doosan	7	6	4	3	4	3	4	2	-	-
Hyundai	3	3	4	3	-	-	2	1	-	-
Schaeff	-	-	-	-	2	2	-	-	-	-
Others	2	2	3	3	3	2	3	2	2	1
Total	**108**	**100**	**117**	**100**	**128**	**100**	**170**	**100**	**175**	**100**

Source: Off-Highway Research

Chart 48. Ireland: Suppliers of wheeled loaders and their market shares, 2019, (units)



Source: Off-Highway Research

Only one other supplier, **Kramer**, gained more than a 10 per cent share. Over the last 10 years, Kramer's market share had dwindled from 12 per cent in 2008, to just 1 per cent in 2017, but the company made strong gains in the following two years, reaching 11 per cent by 2019.

Apart from these four companies, only **Komatsu** and **Yanmar**'s market shares reached double digits in 2019.

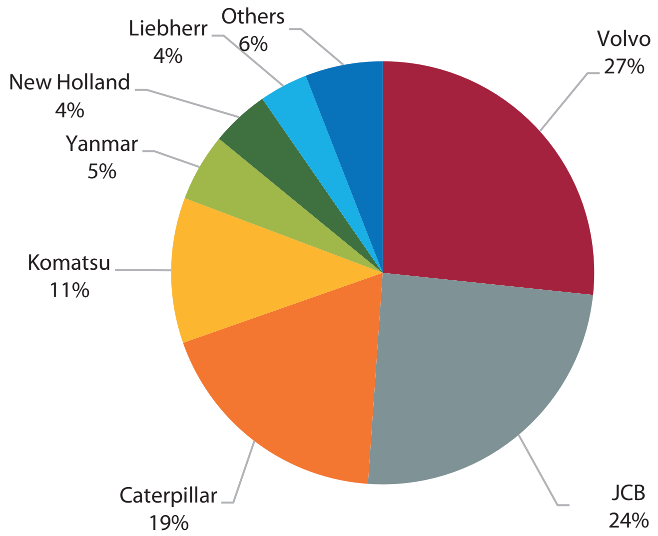
WHEELED LOADERS OVER 80 HP

Table 70. Ireland: Suppliers of wheeled loaders over 80 HP and their market shares, 2015-2019, (units)

	2015		2016		2017		2018		2019	
	Units	%	Units	%	Units	%	Units	%	Units	%
Volvo	40	43	42	40	40	35	48	33	36	27
JCB	15	16	21	20	30	26	40	28	33	24
Caterpillar	8	9	9	9	18	16	24	17	25	19
Komatsu	10	11	15	14	12	10	6	4	15	11
Yanmar	-	-	-	-	-	-	5	3	7	5
New Holland	4	4	4	4	4	3	8	6	6	4
Liebherr	3	3	3	3	4	3	4	3	5	4
Kramer	-	-	-	-	-	-	-	-	3	2
Atlas Weyhausen	-	-	-	-	-	-	-	-	2	1
Case	4	4	2	2	2	2	2	1	1	1
Doosan	7	7	4	4	4	3	4	3	-	-
Hyundai	3	3	4	4	-	-	2	1	-	-
Others	-	-	1	1	1	1	1	1	2	1
Total	**94**	**100**	**105**	**100**	**115**	**100**	**144**	**100**	**135**	**100**

Source: Off-Highway Research

Chart 49. Ireland: Suppliers of wheeled loaders over 80 HP and their market shares, 2019, (units)



Source: Off-Highway Research

Volvo gained market leadership in 1998, its major strength being in the 125-250 horsepower sectors. Only twice since then – in 2004 and 2009 - has it lost its leadership in this market. It is renowned for the quality of its product and also of its after sales support.

JCB has always performed well in this wheeled loader market, given its links to both the construction and the agricultural sectors. Its sales have more than doubled from 15 units in 2015 to 33 in 2019, when the overall market increase was just 44 per cent.

Similarly, **Caterpillar**'s market share has improved substantially over the last five years, from 9 per cent in 2015 to 19 per cent in 2019. Caterpillar machines are often the preferred option for many customers in the quarrying sector, which is gradually seeing an upturn in activity.

Komatsu's performance over the last five years has been somewhat erratic, gaining as much as a 14 per cent share in 2016, but declining to just 4 per cent in 2018. Sales of 15 units in 2019 gained the company an 11 per cent share.

Lying a good deal further behind these leading four companies are **Yanmar**, **New Holland**, **Liebherr** and **Kramer,** combined sales of which account for 16 per cent of the market.

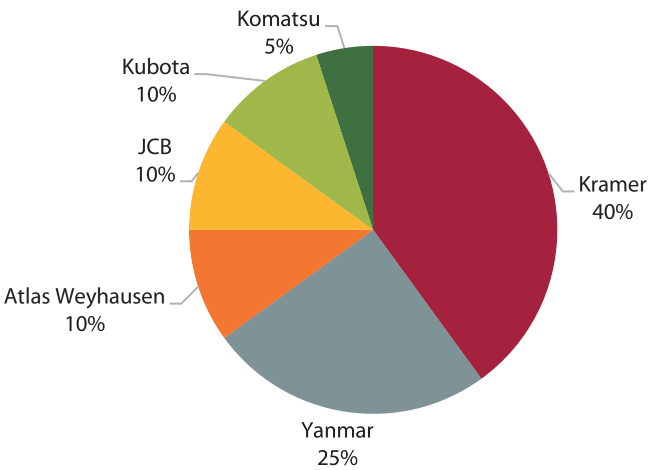
WHEELED LOADERS UNDER 80 HP

Table 71. Ireland: Suppliers of wheeled loaders under 80 HP and their market shares, 2015-2019, (units)

	2015		2016		2017		2018		2019	
	Units	%	Units	%	Units	%	Units	%	Units	%
Kramer	4	29	6	50	1	8	13	50	16	40
Yanmar	-	-	-	-	-	-	5	19	10	25
Atlas Weyhausen	1	7	-	-	3	23	2	8	4	10
JCB	2	14	-	-	-	-	1	4	4	10
Kubota	-	-	1	8	2	15	3	12	4	10
Komatsu	-	-	-	-	-	-	-	-	2	5
Case	1	7	-	-	-	-	-	-	-	-
Schaeff	-	-	-	-	2	15	-	-	-	-
Volvo	4	29	3	25	3	23	-	-	-	-
Others	2	14	2	17	2	15	2	8	-	-
Total	**14**	**100**	**12**	**100**	**13**	**100**	**26**	**100**	**40**	**100**

Source: Off-Highway Research

Chart 50. Ireland: Suppliers of wheeled loaders under 80 HP and their market shares, 2019, (units)



Source: Off-Highway Research

Demand for under 80 horsepower machines is much smaller than that of the larger machines and is largely dominated by **Kramer**. Whilst Kramer did not have a particularly high profile in the market in the past it has been the pioneer of the small horsepower market, especially in the agricultural sector.

Yanmar entered the market taking second place in 2018 with a 19 per cent share, rising to 25 per cent by 2019. This coincided with the appointment of O'Regan Plant Sales as its agent, a company which was well accustomed to the products, given that it had represented Terex Schaeff prior to its acquisition by Yanmar.

Beyond these two suppliers, **Atlas Weyhausen**, **JCB** and **Kubota** were the only companies gaining a double-digit market share, all three selling just four units each, while **Komatsu** sold its first two machines in this smaller horsepower range. **Volvo,** which had attained 29 per cent of the market in 2015 and subsequently declining to 23 per cent by 2017, has been completely absent from this segment for the last two years. That said, in such a small market, just one good order can lead to market leadership.

Table 72. Ireland: Distribution networks for wheeled loaders, 2020

Manufacturer	Distributor
Atlas Weyhausen	Seamus Vaughan Tractors
Case	Jim MacAdam
Caterpillar	Finning Ireland Ltd.
Doosan	Philip P. McCormack
Hyundai	Whelan Plant
JCB	ECI
Komatsu	McHale Plant
Kramer	Via John Deere network
Kubota	Whelan/Crowley/FJS
Liebherr	Liebherr Ireland
New Holland	Philip P. McCormack
Volvo	Pat O'Donnell
Yanmar	O'Regan Plant

Source: Off-Highway Research

POPULATION AND END-USERS

Table 73. Ireland: Population of wheeled loaders by horsepower and end-user, 2020 (units)

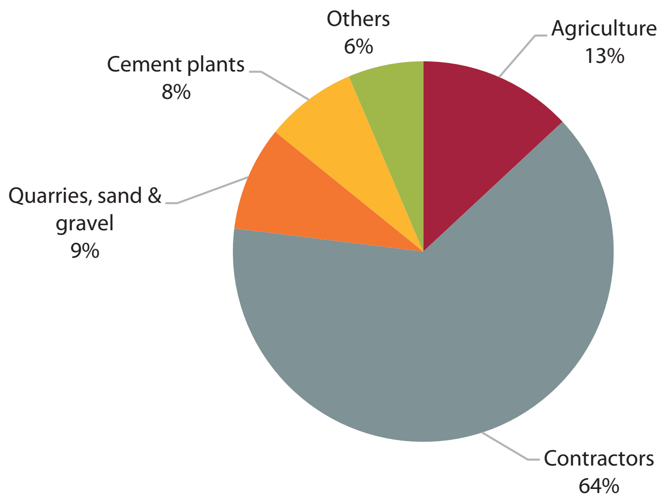
	Under 80 HP	Over 80 HP	Total	%
Agriculture	200	35	235	13
Contractors	315	835	1,150	64
Quarries, sand & gravel	-	160	160	9
Cement plants	-	140	140	8
Others	100	15	115	6
Total	**615**	**1,185**	**1,800**	**100**

Source: Off-Highway Research

The wheeled loader population rose to almost 2,500 machines in 2008, declining to around 2,000 units by 2014 due to the curtailment of activity in the construction sector in the intervening years. Demand is now approaching similar levels to those at the turn of the century however this is not yet sufficient to compensate for the steep decline in sales in the aftermath of construction crash. It is estimated that the machine population has further decreased to some 1,800 units in 2020.

The largest end-user of wheeled loaders remains small owner operators who are subcontracted to work in the building and construction sectors. Agriculture is an important sector in the economy, and wheeled loaders are widely used, especially on cattle farms. Machines over 80 horsepower are used for sand and gravel pits and smaller industrial sites at the bottom end of the size range, through to earthmoving, quarries, and cement plants for the top end of the size range, while waste management and recycling centres are becoming increasingly important end users of wheeled loaders.

Chart 51. Ireland: Population of wheeled loaders by end-user, 2020 (units)



Source: Off-Highway Research

FORECAST

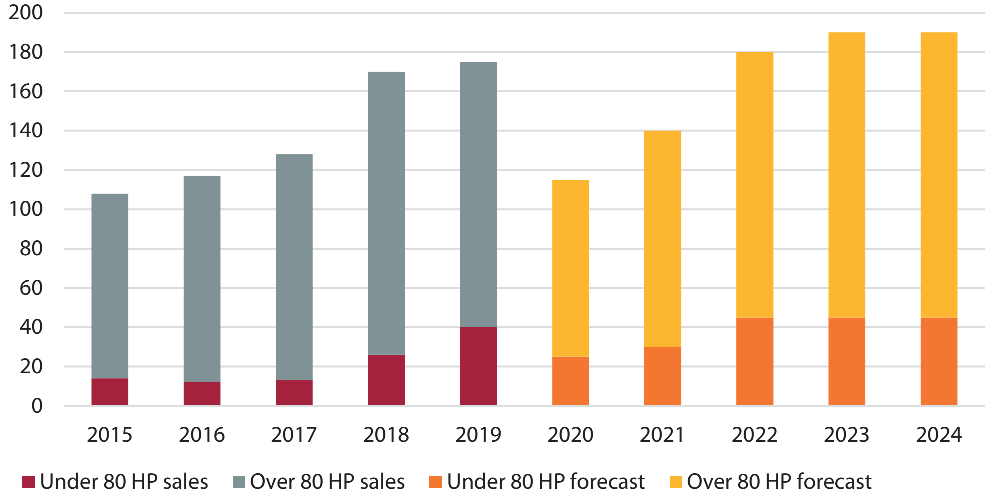
Table 74. Ireland: Forecast sales of wheeled loaders by horsepower, 2020-2024 (units)

	2019	2020	2021	2022	2023
Under 80 HP	25	30	45	45	45
Over 80 HP	90	110	135	145	145
Total	**115**	**140**	**180**	**190**	**190**

Source: Off-Highway Research

As with all types of equipment, the wheeled loader is expected to suffer a decline in demand in 2020 due to the overall reduction in construction activity caused by the coronavirus pandemic. These machines find application in a variety of sectors, all of which are expected to experience growth in the aftermath of the pandemic. In the medium term, demand is expected to return to 2019 levels by 2022, before stabilising at around 190 units per annum.

Chart 52. Ireland: Forecast sales of wheeled loaders by horsepower, 2020-2024 (units)



Source: Off-Highway Research

DISTRIBUTOR PROFILES

Table 75. Ireland: Major distributors of construction equipment and their franchises, 2020

	Asphalt finishers	Backhoe loaders	Compaction equipment	Crawler dozers	Dump trucks	Hydraulic excavators	Mini excavators	Mobile cranes	Motor graders	RTLTs	Skid-steer loaders	Wheeled loaders
Adare Machinery							Bobcat			Bobcat	Bobcat	
Dave Power Plant	Bomag		Bomag						HBM Nobas			
ECI		JCB				JCB	JCB			JCB	JCB	JCB
EMS		Mecalac			Terex Trucks	Doosan					Gehl	
Finning Ireland	Caterpillar	Caterpillar	Caterpillar	Caterpillar	Caterpillar	Caterpillar	Caterpillar		Caterpillar	Caterpillar	Caterpillar	Caterpillar
FJS Plant						Kubota, LiuGong	Kubota					
Irlequip								Grove				
Jim McAdam		Case				Case	Case			Manitou	Case	Case
McSharry Bros.						Kobelco	Kobelco					
Liebherr Ireland				Liebherr	Liebherr	Liebherr		Liebherr		Liebherr		Liebherr
McHale Plant		Komatsu		Komatsu	Komatsu	Komatsu	Komatsu		Komatsu	Merlo		Komatsu
O'Regan Plant Sales						Yanmar	Yanmar					
Pat O'Donnell	Volvo		Volvo		Volvo	Volvo	Volvo					Volvo
Philip McCormack					Doosan							Doosan
TBF Thompson					Bell	Hitachi	Hitachi					
WAC McCandless	Dynapac		Dynapac									
Whelan Plant						Hyundai, Kubota	Hyundai, Kubota					Kubota
Wirtgen Ireland	Vögele		Hamm									

Source: Off-Highway Research

ECI

Address	**ECI** Aerodrome Business Park Rathcoole Co. Dublin
	D24 X32H
Tel	+ 353 (0)1 500 8700
Web	www.ecijcb.ie
Ownership	Private company
Staff	70
Turnover	€47 million
Franchises	**Products**
JCB	Full range

Source: Company Information

The company has been the JCB dealer since 1984, prior to which the manufacturer's interests had been represented by Blackwood Hodge Ireland. In the 1990s, when the JCB product range expanded considerably, ECI became committed to being a single franchise company and no other franchises are represented.

JCB's name in Ireland was initially largely built on the success of its backhoe loader range, and throughout the 1970s and 1980s this was the best-selling machine in the country. The problems experienced in the housing sector after the crash prompted JCB to improve its position in the excavator and wheeled loader sectors. This broadening of the JCB product range has seen the company expand its sales substantially, particularly with the telescopic rough terrain lift truck which has now become one of the largest volume product sectors in the country, but also with wheeled loaders. JCB generally ranks first in the market in terms of unit sales, but it was overtaken by Kubota in 2019.

SALES

Table 76. ECI: Sales of JCB construction equipment, 2019 (units)

Backhoe loaders	37
Crawler excavators	36
Mini excavators	52
RTLT masted	3
RTLT telescopic	159
Skid-steer Loaders	1
Wheeled excavators	5
Wheeled loaders < 80 hp	4
Wheeled loaders > 80 hp	33
Total	**330**

Source: Off-Highway Research

Until the beginning of 2008, the market was continually growing and ECI had been a major beneficiary of that growth. The collapse of the housing market in particular had a significant impact upon ECI's business, but the company was able to survive the downturn and was well positioned to take advantage of the eventual upturn.

STRUCTURE OF DISTRIBUTION

With headquarters based in Rathcoole Co Dublin, ECI JCB has a 27,000 square foot building including a parts department, fully equipped workshop repair facilities with full administrative and training support facilities on the 3-acre site.

It also has a depot in Carrigtwohill Co. Cork, with a parts department and machine repair workshop facility.

The company has a mobile fleet of service engineers who are based at both locations, as well as remotely base service personnel, and a field-based sales team.

EMS MACHINERY

Address	**EMS Machinery** Beech Avenue Naas Enterprise Park Newhall, Naas
	Co. Kildare
	W91XC44
Tel	+ 353 (0)1 451 1282
Web	www.emsmachinery.com
Ownership	Private company
Franchises	**Products**
Doosan	Crawler and wheeled excavators
Gehl	Skid-steer loaders, wheeled loaders
Kaeser	Compressors
Mecalac	Backhoe loaders, site dumpers
Montabert	Hydraulic rock breakers
Terex Trucks	Rigid dump trucks

Source: Company Information

EMS, which is based in Newhall, to the south west of Dublin, was established in 1989. In July 2013 it became the subject of a management buyout, when Seamus Flynn and Eamon O'Loughlin purchased the company from its previous owners, Messrs Dilworth and Duke.

Prior to the 2007 crash, EMS had a number of franchises, including the full range of Doosan products, Bell Equipment articulated dump trucks, Wacker Neuson site dumpers, Terex rough terrain lift trucks and I-R ABG compaction equipment. With the collapse of the construction industry, the market for new equipment ground to a halt. EMS had already been active in the sale of second-hand equipment and this was its salvation during the 'wilderness' years. From 2009 onwards, EMS purchased surplus used equipment and exported it to 67 countries worldwide.

When the supply of used equipment in Ireland began to dwindle, and the market was not yet ready to purchase new equipment, EMS turned its attention outward and sourced used equipment in Europe, which was shipped out directly from Rotterdam.

Re-entering the domestic new equipment market with strong partners was a vital part of the growth strategy of the company. EMS prefers to have franchises for all market segments rather than concentrating upon a single supplier, as this provides it with greater flexibility in a changing market. In April 2015, it was appointed official Terex Trucks dealer in Ireland for both articulated and rigid dump trucks, as well as backhoe loaders and compaction equipment, and in September of the same year, the company was appointed Gehl's dealer in Ireland

When Terex compact equipment was acquired by Mecalac in 2016, EMS continued to market the Terex equipment under the new Mecalac brand.

In January 2020 EMS became Doosan's dealer for the full range of crawler and wheeled excavators in Munster and Connacht, in addition to Leinster.

SALES

Table 77. EMS: Sales of construction equipment, 2019 (units)

Doosan	
- Crawler excavators	30
- Mini excavators	27
- Wheeled excavators	4
Gehl	
- Skid-steer loaders	-
Mecalac	
- Backhoe loader	4
Total	**65**

Source: Off-Highway Research

STRUCTURE OF DISTRIBUTION

EMS runs its sales operation from its premises in Naas, just outside Dublin, where it has a full workshop and spare parts facility.

FINNING IRELAND

Address	**Finning Ireland** Unit A, Aerodrome Business Park Collegeland Rathcoole Dublin D24 WC04
Tel	+ 353 (0)1 257 4000
Web	www.finning.com
Ownership	Part of Finning International
Franchises	**Products**
Caterpillar	Complete range

Source: Company Information

Finning Ireland is part of Canada based Caterpillar dealer Finning International Inc. In 2010, Finning International Inc. acquired certain assets of the previous Caterpillar dealer, McCormick MacNaughton, when this long-standing Caterpillar dealer in Ireland went into receivership. Finning Ireland subsequently established itself on both sides of the border, with branches in Dublin and in Lisburn, near Belfast.

SALES

Table 78. Finning Ireland (Dublin): Sales of construction equipment, 2019 (units)

Caterpillar	
- Articulated dump trucks	7
- Backhoe loaders	4
- Crawler dozers	5
- Crawler excavators	57
- Mini excavators	47
- Rigid dump trucks	2
- Telehandlers	7
- Wheeled excavators	4
- Wheeled loaders	25
Total	**158**

Source: Off-Highway Research

STRUCTURE

Finning is the Caterpillar dealer for the whole of Ireland, and has depots in Lisburn, near Belfast in Northern Ireland, and Dublin in the Republic. In the spring of 2014, the company moved from its site at Greenogue Business Park to custom built premises on the nearby Aerodrome business park. Finning Power Systems is also located at this site.

The downturn in demand inevitably impacted upon the company, especially the absence of activity in the quarrying business where Caterpillar's heavy equipment is widely used. While sales of Caterpillar equipment have continued to rank in fourth place, the company's market share has declined due to the change in the mix of products being sold in the recent market. Finning has used the lull in the industry to establish itself in the market and is well placed to benefit from a return to a higher level of infrastructure investment in Ireland.

LIEBHERR-CONSTRUCTION EQUIPMENT IRELAND

Address	**Liebherr-Construction Equipment Ireland Ltd** Unit 23N Greenogue Industrial Estate Rathcoole Co Dublin D24 P38P
Tel	+ 353 (0)1 458 7650
Web	www.liebherr.com
Ownership	Wholly owned by Liebherr GB Ltd
Franchises	**Products**
Liebherr	Full range

Source: Company Information

Liebherr set up its sales subsidiary in January 1997, when the conflict of interest with Volvo became so great that the Liebherr franchise could not remain with Pat O'Donnell. In 2008 Liebherr-Construction Equipment Ireland Ltd. was set up, serving both the Republic of Ireland and Northern Ireland for construction plant and equipment.

The Liebherr mobile crane business is operated directly from its UK premises, in Biggleswade, in line with the majority of other crane manufacturers. Liebherr also has a factory in Killarney in south-west Ireland, initially set up to manufacture tower cranes, but now developing and producing ship-to-shore container cranes, rubber tyred and rail-mounted stacker cranes and accessories. Although this facility has its own sales operation, the Killarney factory has raised awareness of the Liebherr brand in Ireland.

SALES

Table 79. Liebherr: Sales of construction equipment, 2019 (units)

Crawler excavators	4
Mobile cranes	18
Wheeled excavators	5
Wheeled loaders > 80 hp	5
Total	**32**

Source: Off-Highway Research

Liebherr has made a modest impact in the market. Sales of crawler dozers were heavily dependent upon the Bord Na Móna, and no significant orders have been forthcoming for several years, nor are there likely to be any more, as Bord Na Móna no longer extracts peat. Excavator and wheeled loader sales have broadly kept in step with the gradual expansion of the market, but it is unlikely that Liebherr will become anything more than a modest supplier in the future.

STRUCTURE

Liebherr has a lean organisation to develop its sales in Ireland. It has one facility in Rathcoole, with sales and service engineers located throughout the country.

JIM MACADAM EQUIPMENT

Address	**Jim MacAdam Equipment** Ballymount Road Upper Dublin 24
Tel	+ 353 (0)1 460 1530
Web	www.macadamequipment.com
Ownership	Privately owned
Franchises	**Products**
AUSA	Site dumpers
Case	Full range
Manitou	Telescopic rough terrain lift trucks, access platforms

Source: Company Information

Jim Macadam is a family-owned business, which was established in 1992. Case's product line has been the main franchise for the company since it was started. In 2009 it was appointed a dealer for Manitou, and more recently it has introduced AUSA site dumpers to the company portfolio.

SALES

Table 80. MacAdam: Sales of construction equipment, 2019 (units)

Case	
- Backhoe loaders	3
- Crawler excavators	25
- Mini excavators	7
- Skid-steer loaders	2
- Wheeled loaders	1
Manitou	
- Telehandlers	130
Total	**168**

Source: Off-Highway Research

Jim MacAdam was one of the first dealers in the country to operate its own hire fleet which has ensured a healthy supply of Case machines into the market. It also enabled MacAdam to compete with potential customers who may have been interested in second-hand machines, but did not necessarily have sufficient work to justify the purchase of a new machine. Over the years, the company has built a solid reputation for its sales support, which has helped maintain a reasonable level of business in recent times, given the constant changes affecting its main franchise.

The company has established a good customer base for the Manitou range and was named Manitou Finance Dealer of the Year in both 2018 and 2019.

STRUCTURE

MacAdam Equipment is located in Dublin, close to the M50 motorway where its sales and servicing operates. It has a team of engineers and a fleet of service vans.

PHILIP P MCCORMACK (PLANT)

Address	**Philip P. McCormack (Plant)** Clane Business Park College Road Clane Co. Kildare
Tel	+ 353 (0) 45 868457
Web	www.pmcplant.ie
Ownership	Privately owned
Franchises	**Products**
Doosan	Articulated dump truck, wheeled loaders
Hydrema	Dump trucks

Source: Company Information

The company has had major changes in franchises over the years. In 2005, it lost the Doosan (or Daewoo as it was then) franchise to EMS, but has since regained part of the franchise, initially for articulated dump trucks and, since January 2020, for wheeled loaders. In the first quarter of 2006, it became the first company to import Chinese-built machinery into the Irish market, when it was appointed to represent XCMG and XCG, however the subsequent market crash made it extremely difficult to introduce a new brand to the market. Also, in 2006, it took on the Lebrero franchise to replace Dynapac, which was moved to Irlequip, however in 2014, the Lebrero factory was closed and production transferred to India. The company currently sells Hydrema dump trucks and provides servicing and spare parts for Doosan articulated dump trucks and wheeled loaders, as well as New Holland equipment.

SALES

The company survived the recession, but it has been a difficult time for this small dealership. With the decline of the construction sector, it has been necessary to seek out new niches. The rise in the recycling and material handling business provided a welcome boost in an otherwise depressed market and the addition of Doosan wheeled loaders to its product range should help to boost sales form 2020 onwards.

Table 81. McCormack: Sales of construction equipment, 2019 (units)

Doosan	
-Articulated dump trucks	1
Total	**1**

Source: Off-Highway Research

STRUCTURE

McCormack has a single branch in Clane, 25 miles to the west of Dublin, supplemented by a network of small sub-dealers scattered throughout the country.

MCHALE PLANT SALES

Address	**McHale Plant Sales** Birdhill Co. Tipperary
Tel	+ 353 (0)61 379 112
Web	www.mchaleplantsales.com
Ownership	Privately owned
Staff	41
Franchises	**Products**
Komatsu	Full range
Komatsu Forest	Forest harvesting equipment
Merlo	Telehandlers
Metso	Mobile and static crushers
Terex Ecotec	Wood & biomass processing equipment

Source: Company Information

The company was founded in 1952 by Michael McHale senior, the late father of the present company director, Michael McHale, selling used equipment. In September 1994 Michael McHale (junior) took over the company and started selling new equipment, initially as a sub dealer of the UK Komatsu importer, Marubeni-Komatsu. As a result of McHale's strong performance in the market, on 1st January 2006, McHale Plant Sales became the official Komatsu importer for Ireland.

The company has since expanded and now manages a portfolio of international brands, including Komatsu Forest harvesting equipment, Metso mobile and static stone crushing equipment, Merlo telehandlers and Terex Ecotec wood and biomass processing equipment.

SALES

Table 82. McHale: Sales of construction equipment, 2019 (units)

Komatsu	
- Articulated dump trucks	5
- Backhoe loaders	1
- Crawler dozers	12
- Crawler excavators	66
- Mini excavators	24
- Wheeled excavators	3
- Wheeled loaders	17
Merlo	
- Telehandler	35
Total	**163**

Source: Off-Highway Research

The company is market leader in the crawler dozer market, having gained an average of 59 per cent share over the last five years. McHale aims to be the leader of the crawler excavator market and has moved from sixth place with a 7 per cent share in 2015 to rank in second place in 2018 and 2019 with a 15 per cent market share.

It has also increased its sales of Merlo telescopic handlers, strengthening its market share from 5 per cent in 2015 to 9 per cent in 2019.

STRUCTURE

In addition to the company headquarters in Birdhill, approximately 20 miles east of Limerick, the company has a depot in the Greenogue Business Park in Rathcoole, to the west of Dublin.

MCSHARRY BROS MACHINE SALES

Address	**McSharry Bros. Machine Sales** Old Brick Site Four Mile House Roscommon
Tel	+ 353 (0)90 6629500
Web	www.mcsharrybros.com
Ownership	Privately owned
Franchises	**Products**
Kobelco	Full range

Source: Company Information

The company was founded in 1970 by Michael McSharry, selling agricultural tractors. In 1980, it was appointed the Berco dealer for all of Ireland and in 1992 McSharry Bros (Manufacturing) Ltd. was established, retaining the Berco dealership.

McSharry had been sub dealers of Hitachi UK from 1990 until the Fiat-Hitachi split in 2002. At this point, McSharry opted to stay with Fiat-New Holland rather than Hitachi, however in 2012 the company made the decision to return to its Hitachi roots. Following Kobelco's return to Europe, McSharry was appointed Kobelco's exclusive dealer throughout the Republic of Ireland and Northern Ireland in 2014.

McSharry TRACK is the specialist undercarriage division of McSharry Bros. representing Berco in Ireland.

SALES

Table 83. McSharry Bros. Sales of construction equipment, 2019 (units)

Kobelco	
- Crawler excavators	46
- Mini excavators	50
Total	**96**

Source: Off-Highway Research

STRUCTURE

McSharry operates from extensive premises in Roscommon, north-east of Galway.

PAT O'DONNELL

Address	**Pat O'Donnell** California Heights Chapelizod Dublin 20
Tel	+ 353 (0)616 1000
Web	www.patodonnell.com
Ownership	Privately owned
Staff	94
Franchises	**Products**
Avant	Micro wheeled loader
Rammer	Hydraulic hammers
Sennebogen	Material handling equipment
Volvo	Full range
Volvo Penta	Engines

Source: Company Information

Pat O'Donnell and Co. was founded in Dublin in 1970 with the agency for the Volvo Loading Shovel. A branch was also opened in Portadown in Northern Ireland in 1970, and this was followed by the Cork and Galway branches in 1980. Until 1996 the company also represented Liebherr, however the conflict of interest caused by Volvo's acquisition of the Åkerman excavator range eventually meant that Liebherr felt obliged to find a new dealer.

In 2015, the company welcomed three new agencies: Sennebogen, Avant and Thwaites, thereby adding material handling machines, tool carriers and site dumpers to its range. Pat O'Donnell no longer represents Thwaites but enjoys a good level of success with Sennebogen.

In 2018, O'Donnell was appointed Irish dealers for Magni telescopic handlers, but despite initial success, Magni felt that they would prefer to sell directly in this small market, and the two companies officially parted company in October 2020.

O'Donnell also represents Rammer and Volvo Penta.

SALES

Table 84. Pat O'Donnell: Sales of construction equipment, 2019 (units)

Volvo	
- Articulated dump trucks	15
- Crawler excavators	9
- Mini excavators	50
- Wheeled loaders	36
Total	**110**

Source: Off-Highway Research

Volvo is one of the country's major brand names, and one which has been built up over many years before the country became a market of any interest. During the boom period, the major expansion of the road programme led to an increase in earthmoving works, which favoured articulated dump trucks, and quarrying which required wheeled loaders and crawler excavators. O'Donnell performed very well for Volvo in all of these products. In common with all the major construction equipment suppliers, O'Donnell had to settle for much lower levels of sales until the market began to recover in 2015.

STRUCTURE

O'Donnell operates from impressive facilities on a 4-acre site in Chapelizod in north west Dublin, close to the ring road motorway, and also has depots in Cork and Galway, and in Portadown in Northern Ireland.

TBF THOMPSON

Address	**TBF Thompson** Unit 34a Lavery Avenue Park West Industrial Park Nangor Rd. Dublin D12 TD91
Tel	+ 353 (0)1 4019 300
Web	www.tbfthompson.com
Ownership	Privately owned
Franchises	**Products**
Bell Equipment	Articulated dump trucks
Bomag	Compaction equipment
DAF	Trucks
Doosan Portable Power	Mobile compressors
Hitachi	Construction equipment
Montabert	Hydraulic breakers
Palfinger	Truck-mounted cranes
Thwaites	Site dumpers

Source: Company Information

Thomas Bacon French Thompson started the company in 1930 in Northern Ireland and ran it until his retirement in 1985. In 1977 Thompson sold the business to Dublin based aggregates company, Cement Roadstone. In 1999 a management buyout returned the company to local ownership when it was sold to a management team comprised of Andy Magowan, Raymond Crilly and Mark McCluskey. By this point the company had a plant depot in Dublin as well as in Mallusk in Northern Ireland, but the former was forced to close in 2010 as a result of the economic downturn.

Andy Magowan's retirement in 2016 led to a new management buyout, by Raymond Crilly, Alan Espie and Seamus Doherty. In July 2018, after an eight-year absence, the company returned to Dublin, opening a new depot in Parkwest. Initially representing only Hitachi, it has since acquired franchises with Doosan Portable Power, Cummins and Bell Equipment amongst others.

SALES

Table 85. TBF Thompson: Sales of construction equipment, 2019 (units)

Bell Equipment	
- Articulated dump trucks	4
Hitachi	
- Crawler excavators	78
- Mini excavators	106
Total	**188**

Source: Off-Highway Research

In July 2019, TBF Thompson was appointed the authorised distributor for Bell Equipment articulated dump trucks across the whole of Ireland. In March 2020, Thwaites announced the expansion of their distribution deal with TBF Thompson to cover the whole of Ireland. Thwaites is one of Thompson's oldest franchises, having represented the site dumper manufacturer since 1977.

The closure of the Dublin branch had forced its suppliers to seek new representatives, it was therefore not possible to retain all its previous franchises when it reopened in the south. This means that the company has essentially different franchises in the north and south, for example, it has retained the Bomag franchise in Northern Ireland, but has lost it to Dave Power Plant in the south.

STRUCTURE

The head office of Thompson remains in Garvagh, near Coleraine in Northern Ireland. It has three branches, two of which are in Northern Ireland - a plant depot and DAF truck depot in Mallusk and a DAF truck depot in Portadown, as well as a plant depot in Dublin.

WHELAN PLANT SALES

Address	**Whelan Plant Sales** Barefield Ennis County Clare
Tel	+ 353 (0)65 684 0488
Web	www.whelanplantsales.ie
Ownership	Privately owned
Franchises	**Products**
Daemo	Hydraulic attachments
Hyundai	Full range
Kubota	Mini excavators

Source: Company Information

Whelan Plant Sales is a family-owned company, which was established in 1994 when it became sold importer and distributor of the full range of Hyundai construction equipment. Prior to this, Whelan had imported second-hand machinery from the UK and Europe, mainly Caterpillar and Hitachi excavators.

In 2007 the company was appointed the Kubota dealer for the west of Ireland and has since Daemo hydraulic attachments to its product offering.

SALES

Table 86. Whelan Plant Sales: Sales of construction equipment, 2019 (units)

Hyundai	
- Crawler excavators	45
- Mini excavators	2
- Wheeled excavators	12
Kubota*	
- Crawler excavators	13
- Mini excavators	374
- Wheeled loaders	4
Total	**450**

*Only a portion of Kubota sales are attributed to Whelan as it shares the territory with two other dealers
Source: Off-Highway Research

Hyundai remained a steady presence throughout the downturn and gradually moved up the ranks in its sales of crawler excavators, reaching market leadership in 2013 and 2014. With the upturn in the market, competition became increasingly stiff and Hyundai gradually lost its dominance, ranking in fifth place in 2018 and 2019.

For Kubota products, it shares the country with two other dealers: FJS in Co. Kildare, and MP Crowley in Cork.

STRUCTURE

Whelan operates from a 30-acre site in Barefield, a village at the northern end of the Ennis by-pass some 25 miles north west of Limerick. The site includes 10,000 ft2 of workshops.

WIRTGEN IRELAND

Address	**Wirtgen Ireland Ltd.** Enfield Industrial Estate Trim Road Enfield County Meath
Tel	+ 353 (0)46 9549 414
Web	www.wirtgen-group.com/en-ie/
Ownership	Wirtgen Group
Franchises	**Products**
Benninghoven	Asphalt mixing plants
Hamm	Compaction equipment
Kleemann	Mobile screening and crushing equipment
Vögele	Asphalt finishers
Wirtgen	Milling equipment

Source: Company Information

Until 2009, the road construction programme had been the object of massive investment by the Irish Government, and Wirtgen was able to take advantage of its local knowledge and presence to establish the Hamm roller as one of the two leading brands in the country. Similarly, the Vögele asphalt finisher gained a stronger profile than ever before.

STRUCTURE

Wirtgen Ireland was established in 2006. Prior to this the franchises had been operating out of Wirtgen's base in Lincoln, with staff travelling from the UK. This was a similar policy to many of its competitors, but by establishing an Irish operation, the company increased its profile immeasurably. In July 2008, the company moved from its temporary accommodation into a new 12,500 m^2 facility with 1,250 m^2 of office space. The new facility was next door to the temporary site, which allowed it sufficient space to undertake sales and service training, as well as stock a considerable number of new and used machines. These new facilities in Enfield gave Wirtgen the opportunity to offer a range of services and support that no other competitor was able to offer at that time.

SALES

Table 87. Wirtgen Sales of construction equipment, 2019 (units)

Hamm A	
- Tandem vibratory roller	71
- Self-propelled roller	8
- Pneumatic tyred roller	1
Wirtgen	
- Asphalt Finishers	7
Total	**87**

Source: Off-Highway Research

The road construction programme has been the object of massive investment by the Irish Government, and Wirtgen has been able to take advantage of its local knowledge and presence to establish the Hamm roller as one of the leading brands in the country. It also profited for a time from Dynapac and Bomag's low level of sales pre-2015, however both have gained considerable ground in the intervening years, challenging Hamm's leading position. It has, however, remained the leading supplier of asphalt finishers.

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