Dear reader,

Welcome to the CECE Annual Economic Report!

2022 was the year of resilience and strength! What can we expect from 2023?

The report you are reading contains an in-depth analysis of the macroeconomic situation in Europe, insights into your major client sectors, such as construction, mining and rental and a substantial focus on the sales performances of machinery & equipment.

In terms of highlight, last year was all about showing resilience and strength. Indeed, an apparent perfect storm of supply chain disruptions, high inflation and war in Europe has been brewing all along the year. Russia’s aggression against Ukraine has brought open war on the European continent and has had a profound impact on the European economy in terms of energy security and affordability. For our industry, Russia is an important export market, but as the figures show, the 40% drop in sales in Russia has been largely replaced by other trade flows. If we don’t account for this drop, overall sales of construction equipment in Europe are actually up by 3%.

Other global regions of Europe’s export have also kept a strong pace. We are publishing this report during the frantic preparations for CONEXPO-CON/AGG where European CE manufacturing will be at the centre stage in a growth oriented market like that of North-America.

The business sentiment that we gauge monthly through the CECE Business Barometer has moved back into optimistic territory at the end of 2022, right around bauma in Munich. The full order books allow us to believe that early 2023 will remain positive, but the uncertainties around inflation and interest rates provide for a very unstable macroeconomic picture. It is now difficult to make a numerical forecast, but the Equipment Market chapter of this report will provide some relevant market intelligence leads for companies and investors to ponder.

Please share this report within your network with no moderation! Indeed, as a publicly available source of information, the CECE Annual Economic Report helps to promote the knowledge and understanding of the sector amongst the wider audience. Comments are always welcome and can be directed to info@cece.eu. If you want to get an overview of the report before reading it, please take a look at this video.

We strive to provide CECE members and the public with all relevant information and intelligence, produced by our own team of economists. Indeed, this report is produced by a small group of experts from the CECE member associations and the CECE team in Brussels. Please read more about them on page 17. The report also includes information provided by our national member associations, shedding light on specific market developments.

I hope you will enjoy the reading!

Riccardo Viaggi
CECE Secretary General

Executive Summary

CONSTRUCTION INDUSTRY
During the past six months there have been significant changes in Europe that have impacted on the economic environment for construction. This includes the war in Ukraine and the anxiety it has caused across the region. As a result, the outlook for growth in new residential construction has deteriorated. The outlook is not much brighter when considering the situation in other sectors within the construction industry.

MINING INDUSTRY
Exploration and drilling activity in the global mining market continued to show growth in 2022. Exploration budgets for the major global mining companies exceeded 2021 and 2020 levels, and in fact were the highest since 2013. Over 80% of spending was on exploration of gold and base metals. Drilling activity was also strong in 2022, matching the 2021 levels.

EXTRA FEATURE: RENTAL INDUSTRY
The ERA/IRN RentalTracker for the fourth quarter of 2022 confirms the faltering confidence in Europe that was first hinted at in the June 2022 survey, but there is no collapse in sentiment. There remains a positive balance of opinion on current business conditions in Europe, but only just.

EQUIPMENT MARKET
In a very challenging economic and geopolitical environment, the European construction equipment market defied the odds in 2022. Sales in the European market almost reached the same level as the previous year, and only saw a minimal 0.6% decline.

OUTLOOK
At the beginning of 2023, manufacturers are reporting a positive business situation and near-term future expectations. Thanks to the strong order backlog, the first half of the year can be considered “safe”. For total 2023, a soft landing with single-digit sales declines on the European market seems realistic.
MACROECONOMIC VIEW

2022: the great awakening of inflation

From an economic perspective, a sustained resurgence in the level of prices was the most striking feature in 2022. It led to a shift in monetary policies towards a more restrictive approach, involving increases in interest rates and a gradual exit from unconventional policies with the start of the reduction in the size of central banks’ balance sheets.

The surge in inflation was the result of the significant imbalances that the world economy had to deal with during the pandemic. This was a result of the significant budgetary and monetary stimuli deployed by many countries during 2021, which led to great pressure on production capacities and resulted in many shortages.

The start of the conflict in Ukraine created further shocks to the economy resulting in increases across a wide range of commodity prices, but which turned out to be temporary.

The damaging effects of higher inflation have been experienced in 2022 with the loss of purchasing power for organisations whose income is not indexed to inflation (companies with low pricing power, employees, etc.). They are also due to the reappearance of significant imbalances on a global scale.

Economies with a high level of income and low overall savings have suffered a drain on their purchasing power (the euro zone in particular).

The economies that have benefited the most are those with a low absorptive capacity and high savings (Middle East, Norway) or whose demand is constrained (Russia). In addition, the restriction on mobility in China during the pandemic for most of 2022, impacted on activity levels.

All in all, the post-Covid rebound phase is over. It gave way to growth that weakened throughout the year.

Following the surge in inflation in 2022, the rise in key interest rates dictated the tempo on the various markets - foreign exchange markets, stock markets, and the interest rate market.

In 2022, the Federal Reserve and the ECB implemented the biggest increase in rates that they have made in a single year. As a result, 2022 marked the end of an exceptional period – one involving negative rates.

While inflation keeps reducing households’ disposable incomes, the decline in economic activity is set to continue in the first quarter of 2023. In Europe, growth is expected to return in the spring as inflation gradually relaxes its grip on the economy.

However, with powerful headwinds still holding back demand, economic activity is set to be subdued, with GDP growth expected to reach 0.3% in 2023 in both the EU and the euro area.

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<th>Gross Domestic Product growth in %</th>
<th>Gross Investment in equipment in %</th>
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<td>2021</td>
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<tr>
<td>Germany</td>
<td>+2.6%</td>
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<td>France</td>
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<td>UK</td>
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<td>Spain</td>
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Sources: European Commission - February 2023
During the past six months there have been significant changes in Europe that have impacted on the economic environment for construction. This includes the war in Ukraine and the anxiety it has caused across the region. Also, policy changes by central banks, including steep rises in interest rates, alongside the tightening of credit. Finally, problems with the availability and cost of construction products have all had a negative impact on the construction sector in 2022, with much of the impact being attributable to the housing sector, both new build and renovation. The era of low interest rates within Europe has ended, and higher interest rates and a weaker economy are making home buyers and businesses more reluctant to invest in new residential and non-residential buildings. In addition, rising costs for building materials have made new investments more expensive, although prices for some building materials have fallen in recent months. Residential sales have slowed down, consumer confidence has plummeted and there is now oversupply of housing in many countries. As a result, the outlook for growth in new residential construction has deteriorated. The outlook is not much brighter when considering the situation in other sectors within the construction industry. However, civil engineering is emerging as the most positive sector, with many countries investing in low-carbon energy and renovation of the existing infrastructure.

**AT LEAST 3% GROWTH IN CONSTRUCTION OUTPUT IN 2022**

Not all data is available yet for construction activity in 2022 in Europe, but the estimates published so far are positive. According to Eurofer, construction output in the third quarter last year in the EU increased by 2%, following an increase of 6.5% in the second quarter, both year on year. This was despite the continued rise in costs and increasing levels of economic uncertainty.

According to Eurostat, in the euro area in November 2022, compared with November 2021, civil engineering output increased by 1.7% and building construction by 1.2%. In the EU, civil engineering output increased by 2.8% and building construction by 1.6%.

Among Member States for which data is available, the highest annual increases in construction output in 2022 were seen in Slovenia (+44.0%), Romania (+20.4%) and Belgium (+12.9%). In contrast, the largest decreases were recorded in Spain (-6.9%), Slovakia (-5.8%) and Germany (-1.2%). According to the European Commission’s latest report, construction output in the EU in October and November grew by an average of 0.7% compared with the previous quarter, following declines in both the second and third quarters.

**CONSTRUCTION ORDER BOOKS ARE STILL WELL-FILLED**

The order books for EU construction firms are still well filled with 9 months of work identified at the beginning of 2023. The confidence indicator for EU construction declined in the first half of 2022, but since then has hovered around a neutral position. This suggests that developments are positive in some subsectors. High energy prices are creating additional demand for energy-saving construction work in both the new build and repair and maintenance markets.

**A DIFFICULT PERIOD OF ADJUSTMENT FOR THE INDUSTRY, BEFORE A RETURN TO GROWTH IN 2024**

According to Euroconstruct, two difficult years can be expected for the construction sector across Europe, with growth forecast at just 0.2% in 2023.
and 0% in 2024. A return to growth in output looks unlikely before 2025.

Construction output in the EU should continue to increase during 2023, but at a very moderate pace. The wider slowdown in economic activity due to the ongoing war in Ukraine is also expected to impact on the construction sector, with falling output expected between the fourth quarter of 2022 and the second quarter of 2023. The civil engineering sector looks positive, but other sectors are expected to record declines in activity.

**DIFFERENT PAST AND FUTURE PERFORMANCES IN THE MAJOR MARKETS**

Italy was the strongest market in Europe in 2021, with a growth in output at 12.1%, driven in part by EU subsidies. Following this, 2022 was an exceptional year for the construction sector in Italy with activity levels reaching close to the peak levels achieved in 2007. The construction market has benefitted from significant private resources, such as the savings accumulated by households and businesses in both 2020 and 2021.

Alongside this, substantial public resources, (tax incentives such as Superbonus as well as National recovery plan funds) have also supported activity. However, in 2023, a turnaround is expected. In addition to soaring prices within the sector, 2022 construction will cost 15 to 20% more than in 2019 according to official sources and inflation has also begun to affect house prices and demand levels. 2023 will be a transitional year, marked by a general slowdown, but overall growth in output is expected to remain positive at 0.9%. This reflects a range of mixed performances across the sectors ranging from -9% for residential repair and maintenance, to +41.7% for new public works. From 2024, the market is forecast to slow down significantly.

Total investment is forecast to decline by 7.1%, and residential repair and maintenance is expected to decline by 22.6%. Incentive schemes have been the main driver for construction work but are set to be reduced. Expectations are different for public works, but a real question mark remains on the implementation of work subsidized by the National plan, and on the ability of administrations and companies to meet the objectives expected by the European Union. The challenges concern not only the design and execution of work, but also the procurement and cost of materials.

The UK is currently one of the worst-performing economies in Europe. According to the Construction Products Association (CPA), construction output is expected to fall by 4.7% in 2023 before recovering slowly in 2024 with growth of 0.6%. Output in the private housing sector is forecast to decline by 11.0% in 2023, as housebuilders focus more on completing existing developments rather than starting new projects.

This fall in activity is primarily due to rising mortgage rates, falling real wages and poor consumer confidence. In addition, government policy is less supportive for house building, with the ending of the Help to Buy scheme, the Residential Property Developer Tax and the Building Safety Levy. In contrast, infrastructure continues to go from strength to strength, reaching historically high levels in 2022 as it benefitted from multi-billion pound projects such as HS2, the Thames Tunnel and Hinkley Point C, as well as long-term frameworks activity in subsectors such as rail, roads and energy.

Looking ahead, further growth in infrastructure is expected but it is likely to be slower than in previous years due to inflation and financial constraints.

The outlook for the construction market in Germany is gloomy. The impact of higher construction costs, labour market constraints, and a challenging financial environment for the industry will continue to weigh heavily on the market in 2023. The impact will be most pronounced in the residential building sector. However, a substantial pipeline of infrastructure projects will offset the wider cyclical decline in construction activity. This is partly due to efforts to diversify Germany’s energy supply following Russia’s invasion of Ukraine. The political reaction to Russia’s invasion of Ukraine has prompted activity to diversify Germany’s energy imports away from Russia, particularly via the construction of the market’s first liquefied natural gas (LNG) import terminals. Finally, the credit rating agency Fitch are forecasting that Germany’s construction industry will grow by a moderate 1.2% in 2023, after a surprising downturn in construction output of 2.3% in 2022.

The construction market in Spain is expected to outperform the Eurozone average in 2023. Euroconstruct expect the construction sector to grow by almost 3% in 2023, after showing growth in output above 12% in 2022. In 2024 and 2025 growth in the sector is expected to ease back to 2% for both years. The implementation of the Recovery and Resilience Plan is set to boost growth in investment, especially in the construction sector. However, the residential sector in Spain is expected to show a decline in activity due to a combination of higher interest rates and lower disposable household incomes having a negative impact on access to affordable mortgages.

Construction output in France increased by 3% for civil engineering and by 10% for...
building work in 2022. However, the price effect is significant within these statistics. With price increases of around 6% to 7% in 2022, building activity measured in volume terms only increased by 3.7%, and civil engineering fell by 4%. The outlook for construction activity in 2023 is subdued due to low economic growth of 0.1% and elevated inflation and high interest rates. Higher prices for construction materials and higher wage levels, together with tighter environmental standards, impact significantly on building costs. In addition, supply chain issues for some materials are still causing delays on construction work.
Slowdown, but positivity remains

The ERA/IRN RentalTracker for the fourth quarter of 2022 confirms the faltering confidence in Europe that was first hinted at in the June 2022 survey, but there is no collapse in sentiment.

There remains a positive balance of opinion on current business conditions in Europe, but only just. More than 100 rental companies responded to the ERA/IRN RentalTracker survey at the end of 2022 and first week of January, with 28% reporting improving conditions against 17% seeing deteriorating conditions – a positive balance of 11%.

That positive result is good, although it is the lowest figure since the Q3 2020 survey, which was undertaken in the middle of a global health crisis that you don’t need to be reminded of.

The fact that 72% of respondents are either seeing no change to conditions (56%) or worsening (17%) may not seem terribly positive, but given the Ukraine war, rising interest rates and global GDP slowdown, it may actually be a much more positive result than we could have expected.

It is true that there is a gentle deterioration across all the measures – business volumes, fleet utilisation, capital expenditure plans, employment intentions – but in each case there remains a positive balance of opinion.

CAPITAL INVESTMENT

At the end of June 2022, more than 50% of respondents were expecting to increase their capital investment in fleet in 2023. By the end of the year, that had fallen to nearer 40%: meaning that the clear majority will stick to 2022 levels of spending or reduce it.

Even so, more will still increase spending than will reduce it, which is an encouraging sign and reflective, perhaps, of a supply chain that has struggled to give rental companies all the equipment they wanted in 2022.

Time utilisation on fleet remains strong, according to the survey, with a tiny number – less than 3% - reporting lower utilisation and around 45% seeing continued improvements. Around half reported no change. Again, this may reflect an ‘artificial’ choke on fleet growth caused by supply constraints.

The positive finding on utilisation follows similar results in all the surveys undertaken since the first quarter of 2021, when the recovery from Covid was in full flight.

EMPLOYING MORE?

Regional What about employment intentions? The desire to add staff has been a feature of all the RentalTracker surveys since the start of 2021 and that remains
NATIONAL DIFFERENCES?

The employment question comes with a complicated backdrop – changing employment patterns post-Covid; an ageing workforce; and shortages in skilled mechanics. Generally, the equipment rental sector is struggling to attract new people to the industry, and that is reflected in the large number of companies still looking to expand recruitment even as the wider economy flattens. Expectations for how business will be in 12 months’ time also results in a positive balance of opinion: 40% expect business to be better, 45% expect it to be the same, and less than 15% expect it to be worse. That positive balance of 26% is slightly better than Q2 2022, but significantly lower than in 2021. It seems difficult to be certain about these national trends because the sample sizes for individual countries tend to be relatively small, which is inevitable given the total number of responses of 102.

That said, the good response from French companies only allows us, unfortunately, to report that the country seems to be the least buoyant of all European nations. It is bottom of all the tables on these pages in terms of intentions to invest, business activity, utilisation trends, and business levels in the final quarter of 2022. Only in employment intentions does it come off the bottom place, replaced by the UK.

However, most notable is the fact just 4% of respondents in France reported improving business conditions at the end of 2022. That finding is in agreement with a recent DLR association survey which reported deteriorating confidence.

The UK is also below average on most counts, although it is not so much the levels of confidence that catch the eye – 50% will still increase spending and 60% reported a better 2022 Q4 year-on-year – but the deterioration since the Q2 survey last year.

In as far as it is possible to say, the Benelux, Germany and Spain are the nations that seem to be most positive about business conditions. Spain continues to recover from a difficult period, and Germany’s rental sector has performed well for several years.

Although there may be a tendency to view the Q4 results negatively – because that is the overall direction of travel - it is worth remembering that the balance of opinion on all the measured categories remain positive.

That illustrates the resilience of the rental market, which seems to be real rather than imagined.
The Parker Bay Company deliveries of surface mining equipment to the global mining market on a quarterly basis. Their latest update for Q4 2022 is shown in the graph below and shows how shipments have continued on an upward trend since the second half of 2020.

In Q4, shipments of equipment were over 1,500 units from the manufacturers who provide data and represented a 19% increase on Q3 levels. In value terms, this represented $2.3 billion and a 15% increase on Q3 levels. For 2022 as a whole, shipments of equipment reached just under 5,300 units – an increase of 26% on the previous year and was the highest level since 2013. In value terms, shipments in 2022 reached $8.6 billion representing a 23% increase on 2021 levels.

Parker Bay operate a mining equipment database which includes eight different types of surface mining equipment. Their latest assessment of the machine population suggests more than 89,000 pieces of equipment were active in the global mining market at the end of 2022. Mining trucks are estimated to account for over 60% of the machine population with over 55,000 in use at the end of 2022. Four equipment types account for over 90% of the machine population and include dozers (over 15,000 machines), hydraulic shovels/excavators (over 5,000 machines) and wheeled loaders (over 4,000 machines).

In the past, prospects for the global mining industry have usually been assessed on the basis of commodity prices, particularly base metals prices. In a changing and more uncertain world, experts are now talking about the impact of environmental issues due to climate change. This often refers to the so called ESG agenda, involving environmental, social and governance issues.

As world supply chains look to meet rising demand, this opens up opportunities and needs for the global mining industry to deliver the materials that the world needs. As a result, many are taking the view that short and medium term prospects for the global mining sector are encouraging.
Taking on board the economic fallout from Russia's aggression against Ukraine, the European market situation looks even more positive. Sales in Europe excluding Russia – where the market declined by 37% as a result of Western sanctions – went up by almost 3% in 2022.

Regional differences were not a significant feature in 2022, as most of the major markets saw very minor rates of growth or decline. However, Southern Europe was a notable exception with 12% growth in equipment sales. Turkey and Russia were the positive and negative exceptions, with close to 40% growth and decline, respectively. Equipment sub-segments also saw similar levels of growth. Road machinery saw a minimal sales increase of 1%, sales of tower cranes were flat and concrete machinery and earthmoving equipment recorded minor declines of 1% and 2%, respectively. Light and compact machines (-0.5%) performed slightly better than the heavy machinery segment (-2%). As supply chain disruptions became less severe during the course of 2022, machine availability improved in the second half of the year. However, the trends were different for some sub-sectors and market regions.

Earthmoving equipment, concrete machinery, and tower cranes saw higher sales as the year advanced, while the momentum slowed down for road equipment and hydraulic attachments.

**EARTHMOVING EQUIPMENT**

Sales of earthmoving equipment in Europe showed a moderate decline of 2% in 2022. After the first quarter had seen minimal growth, a combination of supply chain disruptions and economic fallout from the Ukraine war resulted in the market declining by 8% and 6% in Q2 and Q3, respectively. In the fourth quarter, due to an improved ability to build and deliver machines, sales were up by 1.5% compared with 2021. Sales of heavy equipment (-1%) performed slightly better than the compact segment (-2%), albeit the differences are minimal. Within the compact segment, sales growth was limited to mini excavators (+4%), while all other products saw different rates of decline. Sales of skid-steer loaders went down by 9%, compact wheel loaders saw a decline of 12%, and sales of backhoe loaders fell by 19%. However, the latter is solely attributable to the situation in the Russian market as sales of backhoe loaders in Europe went up if Russia is excluded.

In the heavy equipment segment, wheeled excavators (+3%), crawler excavators (+1%) and wheel loaders (+1%) all
saw modest growth in sales. Motor graders (-4%), ADTs (-7%), and rigid haulers (-8%) recorded moderate declines, while dozers saw a significant downturn of 20%.

From a regional perspective, the largest market Germany saw a small decline in sales of 4%. The UK market maintained its position as the second rank, despite a similar decline in sales of 4%. Following significant growth of 16%, the Italian market surpassed France (where sales were up by 3%) to become the new number three in Europe. Overall, Southern Europe was the best-performing market region (+14%), primarily because Spain (+15%) recorded double-digit growth alongside Italy.

For most of 2022, CEE markets saw double-digit growth rates. However, a very weak fourth quarter pushed the level of sales back to 0%. Nordic markets (+1%) were also virtually unchanged, as were the Balkan markets (-1%). Austria and Switzerland (-6%) and Benelux markets (-9%) experienced modest downturns in sales. Turkey (+40%) and Russia (-33%) saw the positive and negative extremes in levels of sales.

**ROAD EQUIPMENT**

Sales of road machinery in Europe have been exceptional for the last couple of years. They have been fuelled by infrastructure investments from stimulus programmes, and the market even continued to show growth in the first phase of the pandemic, with sales reaching record highs in both 2020 and 2021. 2022 did not disappoint either, as sales grew further by another 1%.

This positive performance was mainly due to solid growth in sales in the first quarter. Following this, Q2 and Q3 saw fairly flat sales and were then followed by a 10% fall in Q4, compared with the previous year’s sales.

This pattern of sales was the opposite to what was seen in the earthmoving segment, where there had been a growing momentum towards the end of the year due to improved machine availability.

This was largely due to higher sales of light compaction equipment which were less prone to supply chain disruptions than the other product segments.

The light compaction segment showed a 2% growth in sales in 2022, with an expanding vibratory plates market (+3%), but also a flat tampers market. Sales of pedestrian rollers dropped significantly by 29% last year, but the impact on overall sales is limited due to low volumes of this product. The heavy compaction segment saw a 6% decline in sales because the two large-volume products single-drum rollers and tandem rollers recorded exactly this level of decline.

The strong sales of trench rollers (+13%) did not have any noticeable impact because they were offset by substantial declines of other products like combi rollers (-26%) and PTRs (-44%). Finally, sales of asphalt pavers fell by 14% in 2022.

Looking at the regional markets, the leading market Germany impressed once more, as sales grew by another 2% from the exceptional levels seen in 2021. France, Europe’s second largest market, saw almost flat sales at -1%, while the UK saw a small decline of 4%. Sales in the CEE markets increased by 7% in 2022, which helped this region to surpass the Nordic markets (0%) in unit sales terms.

Some of the other markets saw surprisingly robust growth. The Benelux market and Austria/Switzerland saw sales...
increase by 18%. In contrast, Southern Europe didn’t meet expectations and growth in sales was limited to a mere 2%. The Turkish market grew by 22% but remains at very low absolute volumes compared with other market regions. Not surprisingly, the Russian market saw a sharp fall in sales of 49%.

**CONCRETE EQUIPMENT**

Sales of concrete machinery on the European market were at very similar levels to 2021 last year and only saw a minimal decline of 0.7%. The first half of the year was rather weak with sales declining by 3% and 11% in Q1 and Q2, respectively. However, the second half brought a return to growth, with a flat third quarter followed by a 15% increase in sales in Q4. This was most likely the result of improved availability to build and deliver machines.

In the light segment, concrete vibration equipment saw a 9% decline in sales. Heavy machinery performed better (+0.1%) but showed diverging product trends. Truck-mounted concrete pumps saw sales grow by 30%, sales of stationary pumps were up by 25%, and truck mixer pumps recorded a 12% increase. In contrast, sales of mixer systems went down by 4%, the largest-volume product, truck mixers, saw an 8% decline in sales, and batching plant sales dropped sharply by 39%. This is not a significant concern, as the high rates of fluctuation in sales for this product are primarily a result of very low volumes (in 2021, batching plants sales increased by more than 30%).

Looking at the major markets, Germany saw a moderate fall in sales of 6% and the French market declined by 17%. The Italian market saw a decline of 11% in sales, but comfortably remains the no. 3 market in Europe. In contrast, some of the smaller markets saw significant increases in sales last year. This includes Turkey, where sales went up by almost two thirds. CEE markets grew moderately by 8%, while Nordic markets (+21%) and Benelux (+20%) saw strong growth. Austria and Switzerland recorded minimal increases in sales of 2%. Declines on the Russian market were moderate last year at -18%, with the market being primarily supplied with exports from Asia.

**TOWER CRANES**

Sales of tower cranes in Europe were almost flat (-0.4%) in 2022, but similar to concrete machinery, saw momentum improving during the year. The year began with a 6% decline in sales in the first quarter, followed by -4% and -1% in Q2 and Q3, respectively. In the fourth quarter, improved machine availability led to double-digit growth of 11%. Sales of saddle-jib cranes in Europe increased by 2% last year, while luffing-boom cranes saw sales decline by a third.

Looking at the market regions in Europe in order of descending volume, the largest market France saw another 13% growth in sales. The German market could not maintain the high level of sales seen in 2021 and ended up with an 11% decline. Italy (+14%) saw double-digit growth in sales, as did the Russian market (+12%), but not via supply from Western manufacturers. Austria and Switzerland saw surprisingly strong growth in sales in 2022 at 21%. The UK market declined by a quarter, Benelux markets saw a 14% fall in sales, and Nordic markets went down by 17%.

**SUMMARY AND OUTLOOK**

Against a backdrop of economic and geopolitical uncertainties, a stable 2022 market performance can be seen as a...
favourable outcome that surpassed expectations. The resilience of the construction equipment industry is noteworthy, compared with many other industries. It is supported by a stable business situation in most customer sectors, but nevertheless is surrounded by a toxic mix of inflation, ongoing supply chain disruptions, and concerns about the world economy. This underlying stability is reflected by robust industry sentiment. The climate index in CECE’s Business Barometer survey went down moderately over the year as the economic fallout of the war in Ukraine unfolded, but then bounced back in November after the bauma exhibition.

At the beginning of 2023, a majority of companies are reporting a positive business situation and have positive expectations about the short-term future. In the February survey, earthmoving equipment manufacturers were again the most optimistic group with six out of ten companies surveyed anticipating growing business.

The positive responses outnumbered the negative ones for all of the product segments. When looking at expectations for business by region, manufacturers regard North America and, to a lesser extent, Latin America as the best prospects. Within Europe, ambitions focus on Germany, France, and CEE markets as the best opportunities. Not surprisingly, the Russian market is still bottom of the list in terms of market expectations. However, this does not necessarily mean that European equipment manufacturers will face declining turnover, as prospects for exports – most notably in North America, and also Latin America and the Middle East markets – remain positive.

Order backlogs within the industry have reduced thanks to slightly better availability to build and deliver machines. However, 60% of European manufacturers are still reporting a backlog of more than four months. This confirms that at least the first half of 2023 is “safe” when it comes to capacity utilization and sales scenarios.

However, the second half of the year might bring about a more challenging scenario. Higher interest rates due to ongoing inflation in Europe significantly on the outlook for the building construction industry, particularly the residential sector. This can be expected to impact on sales of equipment that are used in the residential sector. Similarly, the gardening and landscaping sector will probably see weaker demand after many years of booming sales. In contrast, civil engineering, will probably still benefit from public investment programmes in many European countries. Based on the assumption that the geopolitical scenario does not deteriorate this year, a soft landing on the European market with a single-digit sales decline seems realistic.
SNAPSHOT

The global construction equipment market

Following the peak reached in the global construction equipment market in 2020 and 2021, lower levels of sales are forecast for the next two years. The market recovery following Covid and the impact of low interest rates drove annual sales to record levels of more than 1.2 million units. This is what Chris Sleight - managing director at Off-Highway Research - presented at the CECE Economic Forum at Chamonix in January this year.

This was part of the 2023 CECE Congress hosted by Evolis, the French national association. The lower levels of sales being experienced after the peak are not a result of lower demand. This is remaining strong, but it is being tempered by high inflation and high interest rates, alongside supply chain constraints and shipping and logistics issues.

An interesting feature of the global market in 2022 was the changing market shares of some of the major players. Most significant was the 40% reduction in the level of sales in China, which was overtaken by North America to become the leading global market with sales above 300,000 machines.

Sales in the European market have been on a growth path since 2013 (apart from the decline experienced in 2020), and saw stronger than expected sales in 2022, reaching 200,000 units. However, supply chain constraints are continuing to hold back sales, and a soft landing is forecast for 2023-2025. In terms of the major equipment types, the market continues to be dominated by mini excavators, followed by crawler excavators, telescopic handlers, wheeled excavators, skid-steers and backhoe loaders.

The North American market continued on a growth path in 2022 with a strong rebound in sales to more than 300,000 machines. A modest decline is expected in 2023-2024, when the level of sales will probably fall to around 280,000 units per year. In terms of the major drivers of the market, residential construction stimulated the sales of compact machines (especially tracked loaders), and infrastructure and public spending provided demand for heavier equipment.

However, despite an uncertain economic outlook, especially from an international perspective, investment rates in construction and infrastructure are continuing to act as a driver for the construction equipment market.

The Chinese market experienced a severe decline in 2022 when the market recorded a loss of 40% on the previous year and less than 300,000 machines were sold. From 2023, a recovery path is expected until 2026, but sales are not expected to be anywhere near the peak reached in 2021 when around 475,000 machines were sold.

Finally, Off-Highway Research have focused on the South African market, which is traditionally characterized by a strong mining sector (especially coal, gold and diamonds), which is supported by rental fleets within the country. The market was subdued in the late 2010s, and had a very soft rebound post-Covid due to the weakness of the contractors and rental companies. These are the biggest customers within the region and the market had to adjust to the lower levels of demand than experienced previously.

However, the mining industries provide a core source for demand within the market, with sales of large dump trucks and backhoe loaders remaining as the highest volume products. At present, the construction equipment market in Southern Africa is facing some significant challenges. High inflation, shortages of raw materials and high transportation are impacting the market alongside irregular procurement practices and criminal influences. However, despite this, the region continues to be a key destination for construction equipment.
**EUROPEAN MARKETS**

**National perspectives by CECE members**

The national CECE member associations shed more light on regional developments in the European construction equipment sector, describing main drivers of growth and forecasting the year 2023.

<table>
<thead>
<tr>
<th>Country</th>
<th>How did the market develop in 2022?</th>
<th>What were the main drivers?</th>
<th>What is the forecast for 2023?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belgium</td>
<td>Earthmoving and construction equipment - Invoices &gt;10T: close to 2021 results - Invoices &lt;10T: -6% - Order intakes &gt;10T: 3% (July) - Order intakes &lt;10T: 50% (July)</td>
<td>Earthmoving and construction equipment - The scarce availability of machines in Belgium, combined with massive orders in 2021, created a bottleneck. These delivery problems seem to be resolving for a few months now. Decreases in orders are being offset by deliveries of older orders, flattening the decrease curb. - The order books for infrastructure works are still booming. Thanks to some major projects, of which Oosterweel is a long term infrastructure project supported by the government. - Private estate development is struggling. - The lack of resources (mainly technicians) is worsening and has a severe impact on the activity.</td>
<td>Earthmoving and construction equipment The decrease will not be dramatic in 2023 due to the spreading of deliveries of 2022 orders and the huge Oosterweel project guaranteeing work for years. Source : Sigma (Equipment Representatives for Public and Private Works, Building and Handling).</td>
</tr>
<tr>
<td>Finland</td>
<td>- Equipment import increased by 7% and export increased by 12% - Rental markets estimated to have increased by 8% - Construction increased by 2%</td>
<td>- Main drivers in construction were building projects from previous years and high level of housing and facility construction - Repair construction will increase next year - High inflation with high interest rates will limit construction projects</td>
<td>- Construction will decrease by 2% - Rental markets will decrease by 2%</td>
</tr>
<tr>
<td>France</td>
<td>- Sales growth in the first quarter, weak market in the spring and during the summer, dynamic in the fourth quarter - Stable market in 2022 In detail: - 4% drop for heavy earthmoving equipment, - 1.5% increase for compact equipment, - -1% for road equipment and -12.5% for concrete equipment</td>
<td>- Rental companies back to the market - Market determined by production capacity of factories - Problem of delivery of parts and components less strong - But a year 2022 marked by a sharp increase in prices</td>
<td>Around -5% forecasted in 2023</td>
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</table>
| Germany   | - Construction equipment sales were flat compared to previous year  
- All-time record high of 2021 was confirmed  
- Light and compact equipment had minimal growth while heavy machinery saw small declines                                                                                   | - All customer segments had a robust development in 2022  
- Once more, machine availability was the limiting factor for sales  
- Sector proved very resilient despite much higher input costs  
- In 2023, residential construction will be weaker because of high interest rates                                                                                   | - Sales on the German market are expected to decline by approx. 5%  
- Industry turnover from German production could still grow thanks to good export business                                                                                                        |
| Italy     | - Construction equipment sales up 18% by product line:  
- Earthmoving machines sales up 19%  
- Road equipment sales decrease -10%                                                                                                                                         | - Positive expectations  
- Road works  
- Civil works  
- Safety and 4.0 capital goods incentives                                                                                                                                                                | - Sales volume: +6%                                                                                                                                                                                                          |
| The Netherlands | - Slowdown after significant increase of total market demand last 4-5 years  
- Strong: mid-size rental, material handling, waste handling, demolition, civil  
- Equal: Landscaping, gardening  
- Weak: compact rental                                                                                                           | - The challenges with Nitrogen deposits legislation is still pending but the attention to take constructive actions is moved a bit forward to come first to final conclusions. Too early to estimate how it will influence the construction sector.  
- Strong demand for Zero Emission machines.                                                                                                                             | - 2% economic growth expected in NL  
- The purchase indicators show there is still appetite by customers in NL to purchase machines  
- Stable demand for raw materials related to the construction industry and strong demand in material handling of coal by several industrial port material handling companies  
- Structural growth potential in housing due to shortage in this sector                                                                                                     |
| Norway    | - 1,5% growth in sales quantity  
- Largest growth for excavators  
- Turnover growth in members company with 5,6%  
- Delivery times shorten, and several have machines on stock in the beginning av 2023  
- Lower request for zero emission equipment                                                                                                                               | - Commissioning of public construction projects. Infrastructure road and rail  
- The private marked for home and cottage has fallen dramatically and we need this to increase.                                                                 | - The market has cooled, and from October 22 there has been lower requests for new machinery  
- Rental market is increasing, contractors hesitates to own new machinery  
- The contractors have never been more pessimistic than the last survey (November 22)  
- The member companies are pending for signals for the second half of 2023                                                                                               |
| Spain     | - Construction Equipment sales up by 4,7 % and an increase of 9% since 2019.  
- Earthmoving sales down by 9%.  
- Compaction sales up by 5%  
- Despite growth of more than 5% for two consecutive years, the Spanish economy is still below pre-pandemic levels.  
- Growth in construction sector by 3%.  
- The situation of the war in Ukraine and the increase in energy costs have not been particularly damaging, although problems in the supply chain and inflation in raw materials have caused some problems. | - Economic Growth +5%  
- Activity on major infrastructure projects has supported growth.  
- Significant investments in areas such as railway, housing rehabilitation and development of sustainable cities.  
- Actions to improve quality and reliability in the commuter rail service like a new rail access to the Barcelona airport, improve the electrification of the Valencia and Andalusia network, double tracks and improve level passes in Cantabria, improve the control, command and signaling subsystem in Madrid and Asturias. Also important investments in the Atlantic and Mediterranean Corridors and improvement in Madrid north. | - Sales volume +4%.  
- Slight deceleration of construction market although growing by 1,8% due to slowdown of economy (growth of 1,6%), inflation and rise of interest rates.  
- We expect a growth of 6,5% in civil engineering.  
- Big expectations on the rehabilitation market generated by the stimulus of "Next Generation" funds.  
- The investment in Spain will increase by 6,8% in civil works and engineering.                                                                                          |
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<td>Sweden</td>
<td>- Large back-log of orders</td>
<td>- Continued materials shortages, but improving</td>
<td>- Still strong but somewhat reduced from 2022 levels</td>
</tr>
<tr>
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<td>- Still relatively strong new orders</td>
<td>- Long lead times, but improving</td>
<td>- Decline expected, mainly due to weakening construction sector</td>
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<td>- Good financial year</td>
<td>- Decreasing demand from construction sector, still sufficient</td>
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<td>- Still materials shortages</td>
<td>- Increased demand for low-emission/electric products</td>
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<td></td>
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<td>- Strong mining sector</td>
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<td>- Large share of exports</td>
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<tr>
<td>Turkey</td>
<td>January-November figures increased from 1.598 million USD to 1.780 million USD. This means a growth of 11.4% compared to 2021. In addition, when we look at the January-November figures, the ratio of exports to imports is 110.6%.</td>
<td>- Our important position in the supply chain</td>
<td>The concepts of green transformation, electrification, digitalization and sharing economy are becoming more effective and common in our industry and a size change between +10% / -10% is predicted in Turkish construction equipment market for 2023.</td>
</tr>
<tr>
<td>UK</td>
<td>- Sales of construction and earthmoving equipment grew by just under 3% in 2022</td>
<td>- Construction output grew by 5.6% in 2022. Strongest growth was in the first quarter and activity was fairly flat for the rest of the year, with supply chain constraints being a factor.</td>
<td>- Construction output is forecast to decline by 4.7% in 2023. A weak housing sector is expected to be the main drag on activity. Infrastructure is forecast to show further growth.</td>
</tr>
<tr>
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<td>- Growth in sales was in the second half of the year, particularly Q4, when the impact of supply chain constraints began to ease.</td>
<td>- Strongest growth was in the infrastructure sector, which is already at historically high levels of activity. This sector has benefitted from multi-billion pound projects such as HS2, the Thames Tideway Tunnel and Hinkley Point C.</td>
<td>- Sales of equipment are expected to decline by 7% in 2023, reflecting lower levels of construction activity. Sales in the early part of the year may benefit from delayed demand from 2022 due to supply chain constraints limiting machine manufacturing activity and supply.</td>
</tr>
<tr>
<td></td>
<td>- Equipment sales in 2022 exceeded the peak levels reached in 2021, and were the highest since before the “financial crash” in 2008</td>
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</tbody>
</table>
CECE REPORTING TEAM

Contributors

Take a moment to get to know our CECE reporting Team. Below we list the contributors to this publication.

ROMA GUZIAK
Communications Manager, CECE

Roma keeps the publication in order by managing deadlines and laying out the publication into a publishable version, once all chapters have been drafted. In addition, together with Riccardo, she coordinates the production of the report’s animated movie.

SEBASTIAN POPP
Deputy Managing Director, VDMA Construction Equipment and Building Material Machinery

Sebastian contributes to the publication by providing the text for the Equipment Market chapter, covering tower cranes, earth-moving, road and concrete equipment. Sebastian is also involved in the drafting phase of the script of the report’s animated movie.

PAUL LYONS
Market Information Manager, CEA

Paul, apart from being one of the contributors of the report by drafting the Global Mining Industry chapter, is also responsible for the proof-reading of the entire text. Being a native English speaker, this task was entrusted to him. Thanks to Paul no linguistic bloopers sneak into our report.

RUDOLPH GANZEL
Director of Economic Affairs, EVOLIS

Rudolph is responsible for drafting the Macroeconomic View which provides insights into the economy of the euro zone. He also contributes to the publication by drafting the Construction Industry chapter, covering the construction sector by country.

CORRADO SERRENTINO
Communication & Public Affairs Manager, UNACEA

Corrado contributes to the report by drafting the Snapshots. These chapters change from year to year, in order to cover the most relevant topics for the industry at a given moment in time. The topics range from areas like exhibitions and trade fairs, to major investments and CECE Economic Forums.

RUDOLPH GANZEL
Director of Economic Affairs, EVOLIS

Rudolph is responsible for drafting the Macroeconomic View which provides insights into the economy of the euro zone. He also contributes to the publication by drafting the Construction Industry chapter, covering the construction sector by country.

RICCARDO VIAGGI
Secretary General, CECE

Riccardo is the head of the organisation, and oversees the whole publication. He is also involved in providing input into the report by writing the opening statement and drafting the rental industry chapter. In addition, together with Roma, he coordinates the production of the report’s animated movie.
CONSTRUCTION EQUIPMENT SECTOR IN EUROPE

40 BN € REVENUES

300 000 OVERALL EMPLOYMENT

1 200 COMPANIES

MOST COMPANIES ARE SMEs

<10 MN €: 22%

10-50 MN €: 39%

50-100 MN €: 11%

100 MN € - 1 BN €: 16%

>1 BN €: 11%

What is the Committee for European Construction equipment?

CECE represents the European construction equipment industry towards the European Institutions, coordinating the views of its national member associations, and working with other organizations worldwide to achieve a fair competitive environment via harmonized standards and regulations.

Our figures

- 13 COUNTRIES
- 1,200 COMPANIES EMPLOYING DIRECTLY AND INDIRECTLY AROUND 300,000 PEOPLE
- INDUSTRY REVENUES: 40 BN €
- 20% OF THE WORLDWIDE PRODUCTION

WHAT WE DO

CECE is the acknowledged partner of the institutions of the European Union for all questions related to the construction equipment industry. Based in Brussels, CECE’s work involves political representation and the monitoring of legislation and standardization on behalf of its member associations and their corporate members.

CECE also cooperates with CEN and ISO, the European and International Committees for Standardization. CECE further delivers economic and statistical services to its members and partners.

Representing the interests of the industry

New buildings and infrastructures connect people, boost economies and serve people all over the globe. Construction equipment manufacturers are highly innovative and have invested heavily in increasing the productivity of their machines, while reducing their environmental impact.

The European construction equipment industry forms an important, integral part of the European machinery sector. Manufacturers are predominantly small and medium-sized companies but also large European and multinational companies with production sites in Europe. The industry employs directly and indirectly up to 300,000 people.

Statistics and economic topics

CECE collects and provides up-to-date market data for many types of construction equipment, providing a leading indicator for the development of European construction equipment markets.

Since 2008 CECE runs a monthly business trend enquiry, the CECE Barometer. The companies taking part in the Barometer receive a report about the economic situation in Europe each month.

Exhibitions

CECE gives patronage to a limited number of leading sector exhibitions, contributing to successful trade fairs around the globe.