

Webinar presentation

World Oil Well Cement & Outlook 2021 update

June 10, 2021



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 - About the WOWC

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Presenters

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- Responsible for providing qualitative and quantitative analysis for CW Research. Manages BD for research and consulting projects in Middle East, Asia, and Africa.
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About the CW Group

Advisory

STRATEGY AND M&A ADVISORY

- Strategic advisory
- Management consulting
- M&A advice
- Transaction support
- Due diligence

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- Syndicated market / industry study reports
- Reference forecasts
- Data and chart-books
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Media

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Seasoned experts

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Proprietary data



CEMENT, BUILDING
MATERIALS &
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STEEL, METALS &
MINING



CHEMICALS



DRY BULK CARGO,
PORTS AND
INFRASTRUCTURE



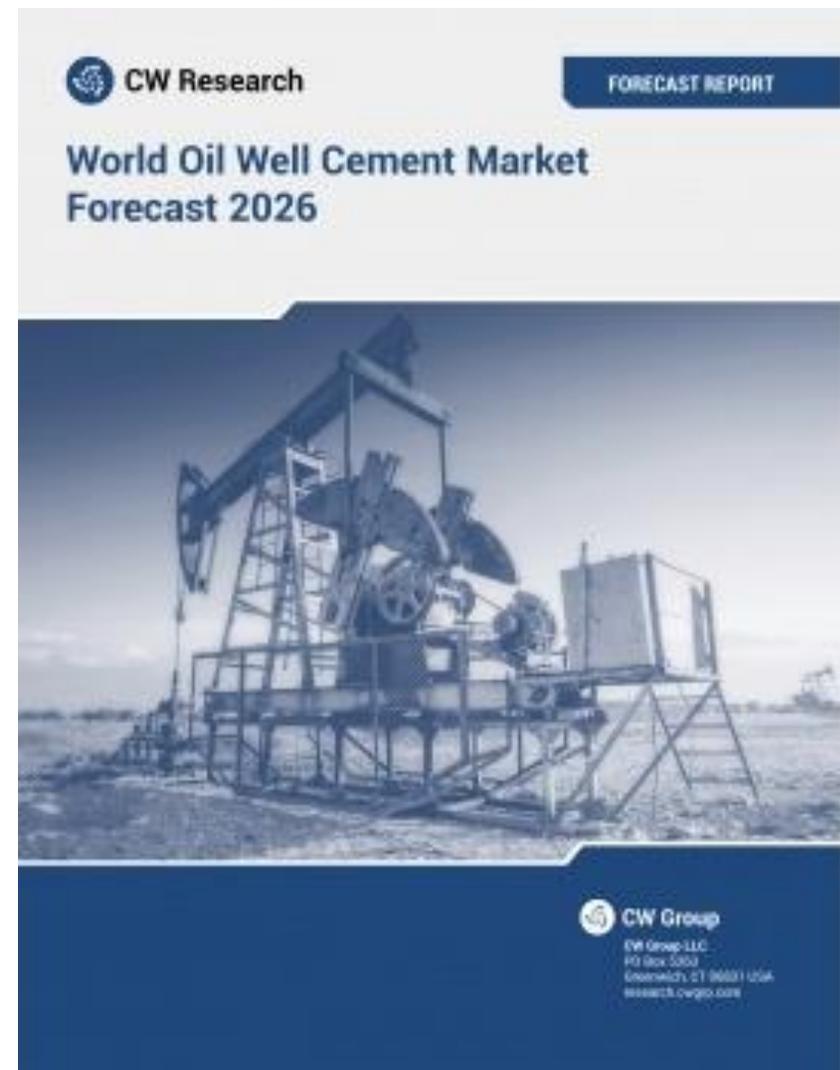
POWER, ENERGY
AND SOLID FUELS



World Oil Well Cement 2021 highlights

What does it include

- CW Research's "World Oil Well Cement Market Forecast – 2026 report" provides an in-depth, data-centric market assessment of the global API-certified oil well cement industry
- Crude oil pricing, drilling activity and oil well cement demand by type of well as well as by type of oil well cement are detailed, while use of extenders including fly ash in oil well cementing is also considered and quantified
- The report also provides three possible market scenarios for all the 33 individual markets detailed, plus regional and world totals
- Mapping of worldwide oil well cement manufacturing locations, existing and upcoming oil well cement capacities is also provided in the report

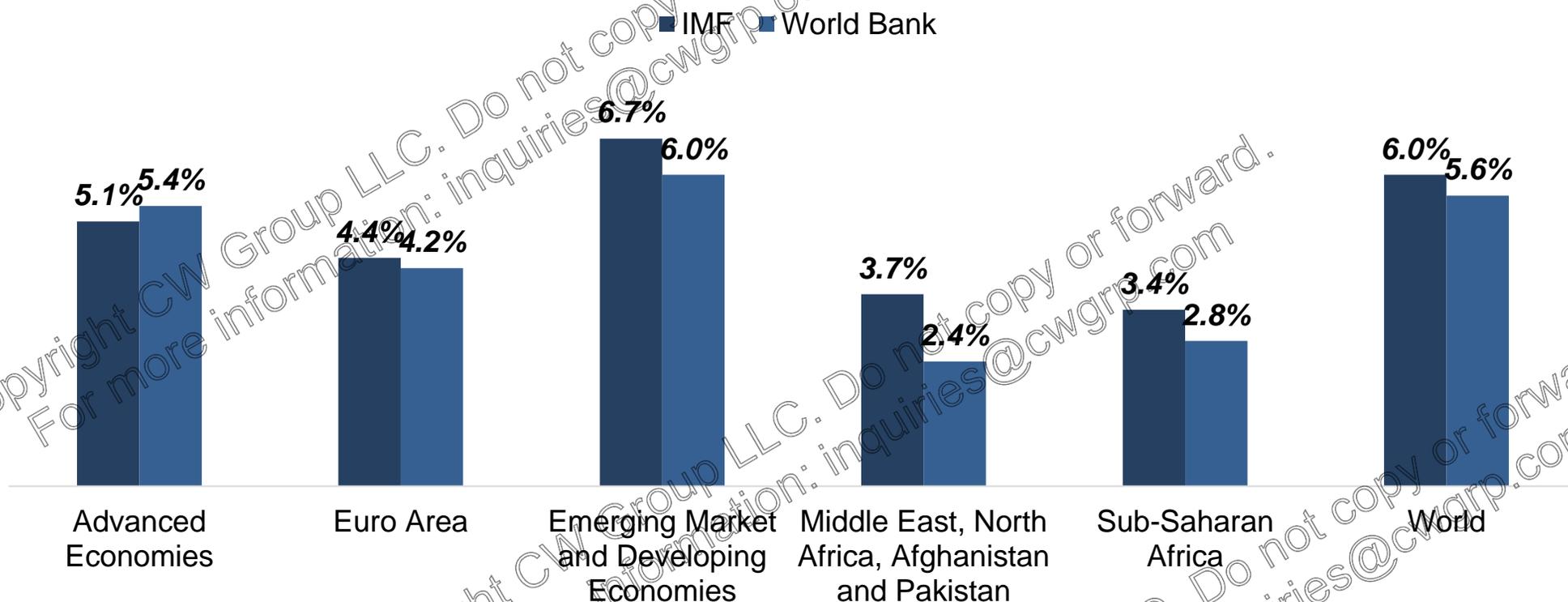


For a complete listing of focus countries as well as more details visit:
<https://www.cwgrp.com/research/research-products/product/320-world-oil-well-cement-market-forecast-2026>

Macroeconomic overview

A strong economic recovery in 2021E remains largely dependent on vaccines rollout and reforms in some regions

World Economic Outlook 2021E (GDP growth rate %)

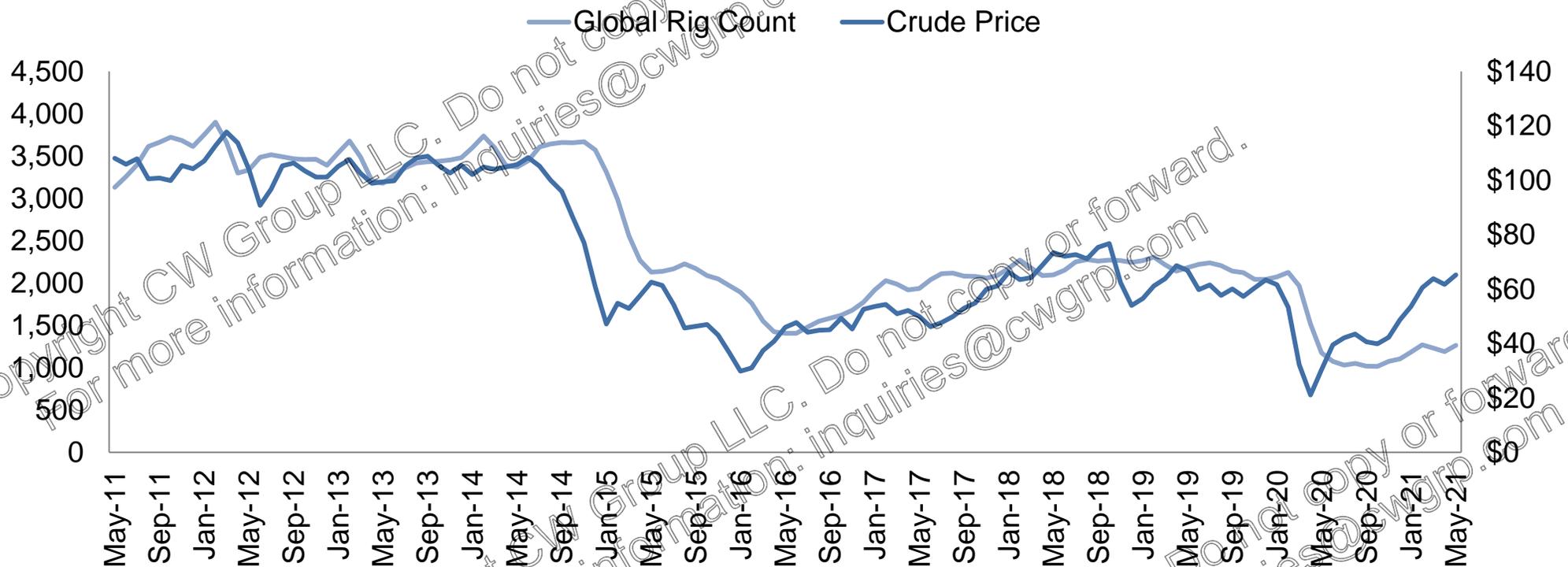


- While the IMF's latest outlook predicts an increase of 6 percent in the global GDP in 2021, the World Bank has a slightly more conservative outlook at 5.6 percent
- Nevertheless, the World Bank expected the strongest post-recession recovery in 80 years for 2021, with growth concentrated in few major economies
- For both, a successful economic recovery still remains highly uncertain, with major risks around the path of the pandemic, the possibility of financial stress amid large debt loads, and continued high unemployment levels

Market overview

Crude oil prices are expected to increase in 2021E as the economies recover from the pandemic

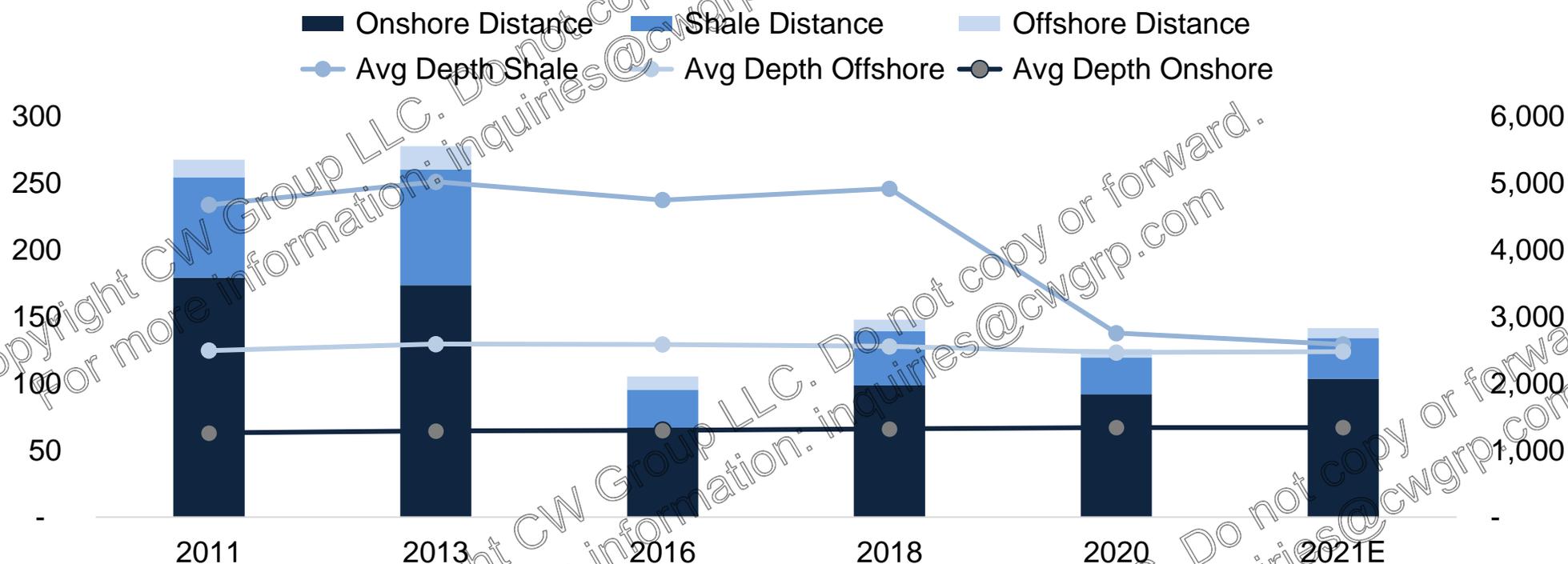
Global rig count vs. crude price (May 2011 - May 2021)



- The global rig count increased from average of 3,465 per month in 2011 to an average 1,228 per month in the first quarter of 2021 due to lower oil prices
- The crude oil price reached a 10-year low at USD 21 per barrel in April 2020, as a result of lockdowns across the world due to the pandemic which led into a slump in oil demand
- Since the lowest point in April 2020, crude prices have more than doubled to reach USD 65 per barrel in May 2021, which is expected to influence an improvement in rig count and well drilling

Onshore wells constitute the majority of oil wells drilled, however, the number of shale wells has increased in last few years

Global new oil well drilling distance (2011-2021E) (LH: Distance in mn meters; RH: avg depth in meters)

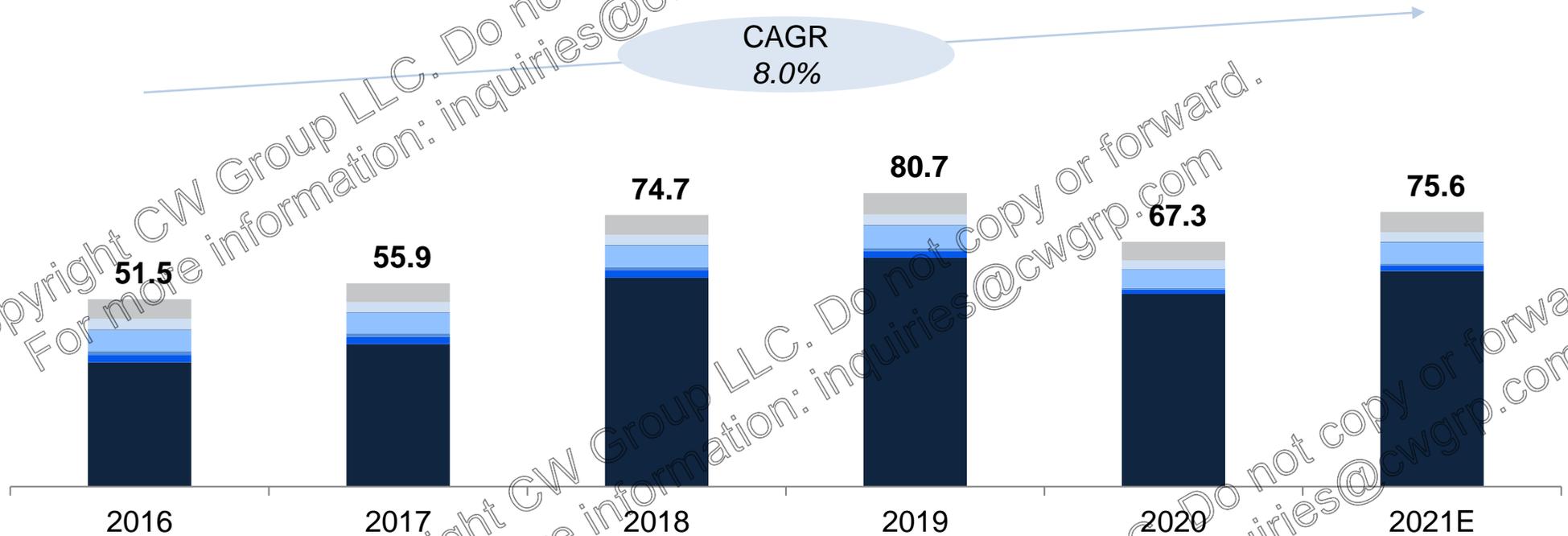


- Onshore oil well reserves usually have a linear depth of 1,300-1,700 meters, thereby implying that the total global onshore drilled distance is between 67-109 million meters during 2016-2021E
- The total drilled distance is estimated to increase by 12.5 percent year-on-year in 2021E
- While the average depth shale is expected to see a decline on yearly basis, average depth onshore is set to remain relatively stable and average depth offshore to increase

Drilled wells are expected to partly recover in 2021E

Global well count by region (2016- 2021E) (In 000's)

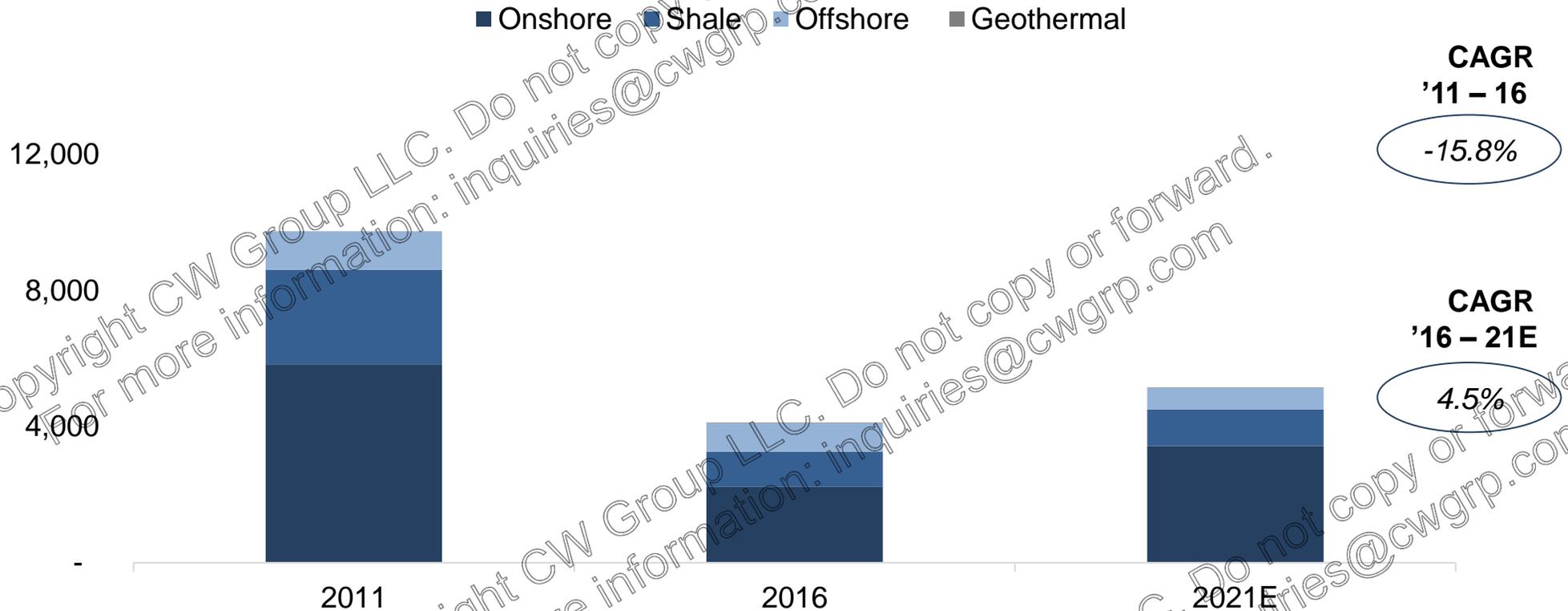
■ North America ■ C&S America ■ Europe ■ MENA ■ Sub Sahara Africa ■ Asia Pacific ■ CIS



- The number of drilled wells globally declined an estimated 17 percent year-on-year in 2020
- Drilled wells are expected to partly recover in 2021E, as governments ease travel restrictions and economies regain momentum
- From 2016-2021E, the number of drilled wells is expected to see an increase of around 8 percent, mostly due to North America's rise in drilled wells numbers

Onshore wells are expected to drive OWC consumption in the 2016-2021E period

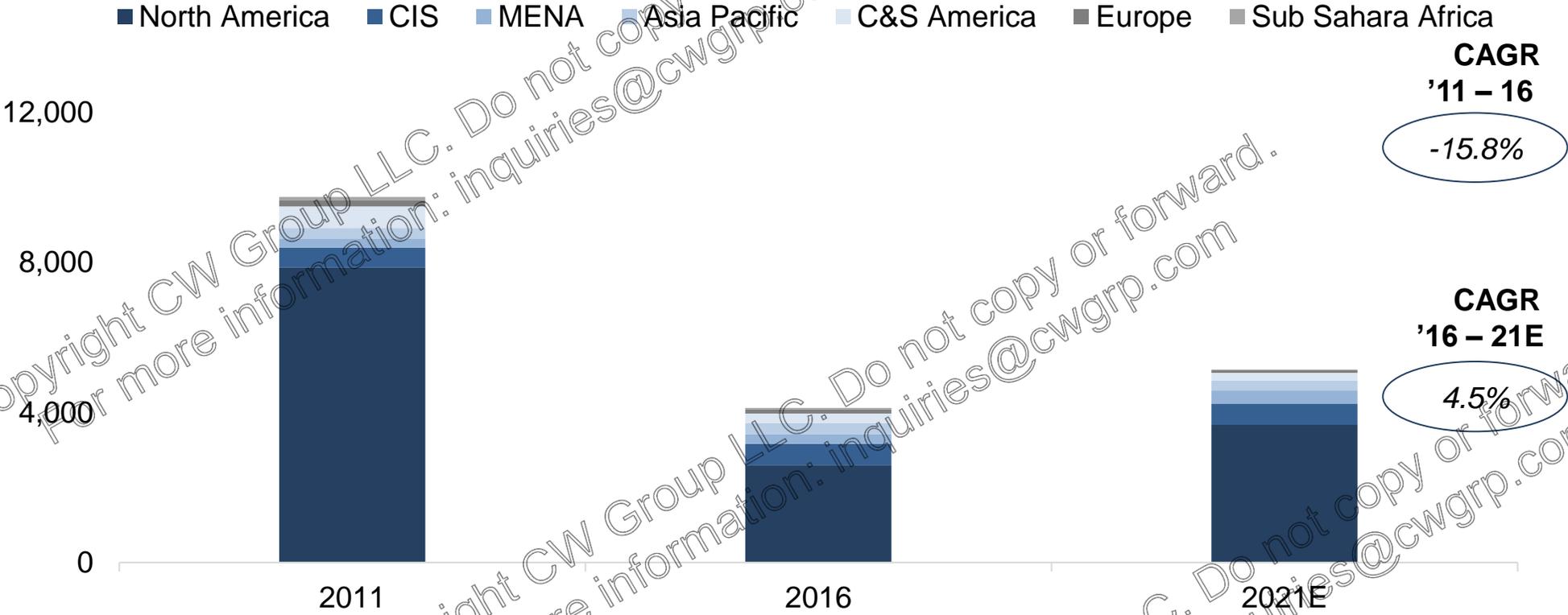
Oil Well Cement consumption by type of well (2011-2021E)



- Onshore OWC consumption is estimated to account for almost 70 percent of the total OWC consumption in 2021E, increasing at a CAGR of 9 percent during the period
- Meanwhile, offshore has been witnessing a declining trend in the last five years, to have a small representation in the global OWC consumption, accounting for approximately 10 percent of total OWC consumption
- Shale and geothermal are expected to account together for an estimated 20 percent of the total OWC consumption in 2021E

N. America is expected to witness the biggest rise in consumption, while Europe is set to have the deepest decline from 2016-2021E

Oil Well Cement consumption by region (2011-2021E)



- Global OWC consumption was severely affected by the fall in oil prices and, after the negative impact in exploration activity, is now in a slow recovery mode
- Consumption of oil well cement in Europe is following the well count trend decreasing continuously in the last five years. However, in 2021E is expected to see a slight recovery
- Total demand for oil well cement in the US and Canada in 2021E is estimated at more than 4.0 million tons

Global oil well cement exports are likely to see a recovery in 2021E

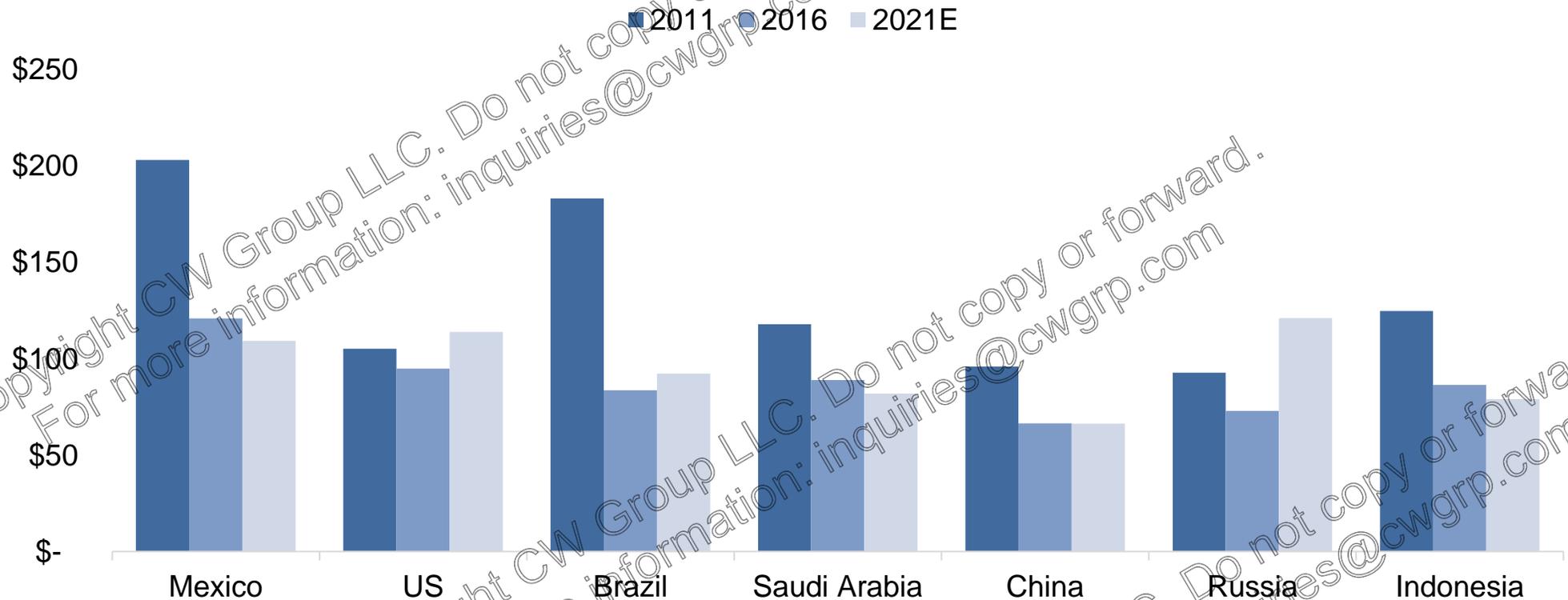
Global Oil Well Cement exporting countries (In 000' tons, does not include additives and OPC)

	2011	2016	2021E
Mexico			
Germany			
China			
Canada			
Turkey			
Indonesia			
Iran			
Totals	419	140	280

- Mexico has been traditionally a leading oil well cement exporter, exporting mostly to the US. For 2021E, exports are likely to increase
- Germany has also been traditionally a strong supplier of oil well cement to MENA, Africa, Asia and C&S America
- China's exports of oil well cement to Asia and African regions are expected to decline in 2021E
- We predict Iran exports to decrease, mostly due to sanctions imposed by the US
- Other exporters including Turkey, Russia and Canada, are expected to see a slight recovery in exports in 2021E

Severe decrease in premium over OPC since in 2016 in most markets and a slight rebound by 2021E in key markets

OWC premium trends for select markets (2011-2021E) (in USD/ton)

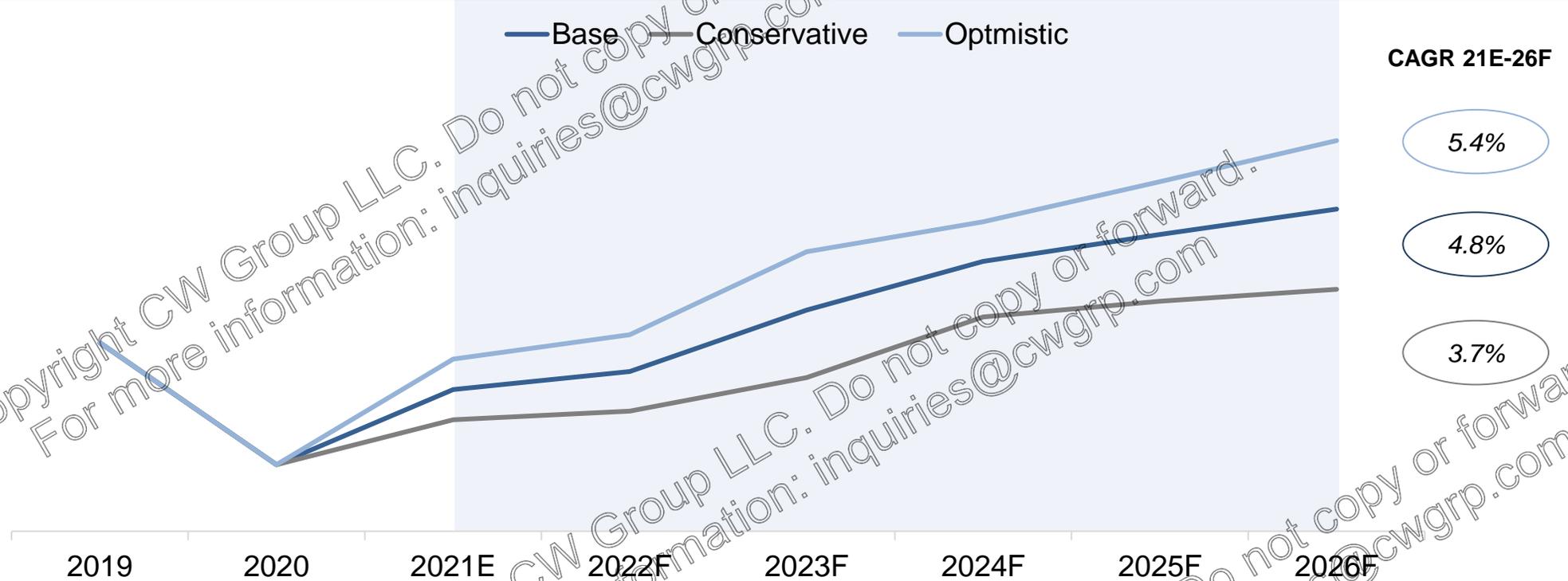


- With the drastic decrease in drilling activity in 2015/2016 due to oil price crash, the premium had declined to almost 1-1.1x in several markets
- More recently, in 2020, due to the Covid-19 and crude oil prices decline, OWC prices declined furthermore
- The premium for OWC is still expected to register lower levels in 2021E in comparison with 2016

Market outlook

Drilling activity is expected to pick up in the long term. However, even in the optimistic scenario, it won't be back to the "golden era" any time soon

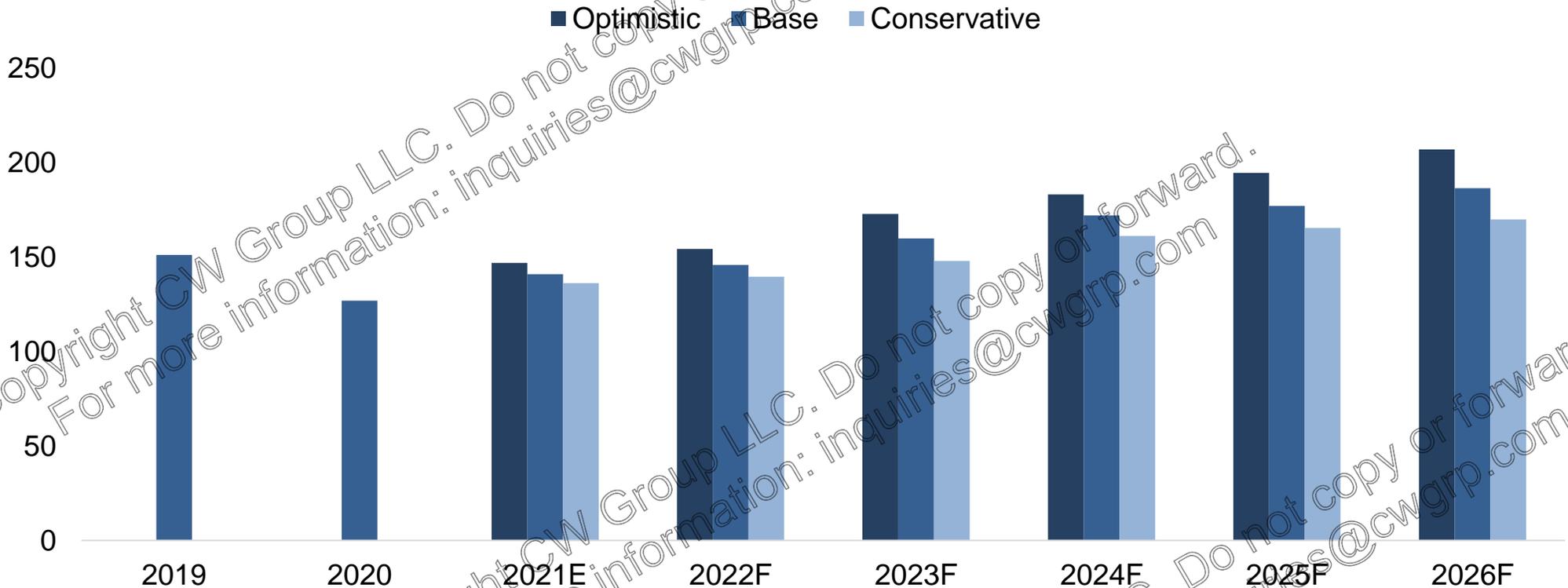
Global new oil well drilling outlook scenarios (In units)



- CW's conservative scenario takes into account a dire case outlook on crude prices, long-term oversupply scenario, anemic economic growth globally, and impact of debt on shale players resulting in a drastic drop in drilling in the US
- On the flip side, CW's Optimistic scenario expects that the global crude prices will likely have a strong recovery coupled with a global economic recovery in line with IMF growth expectations, which will boost demand
- CW's base scenario represents CW Research's best estimates as the probable demand scenario over the forecast period for crude prices, number of wells and distance drilled as well as the demand for cementitious material (ordinary Portland cement, oil well cement and additives)

Even in the optimistic case in 2026F we are not likely to see the highs of 2014

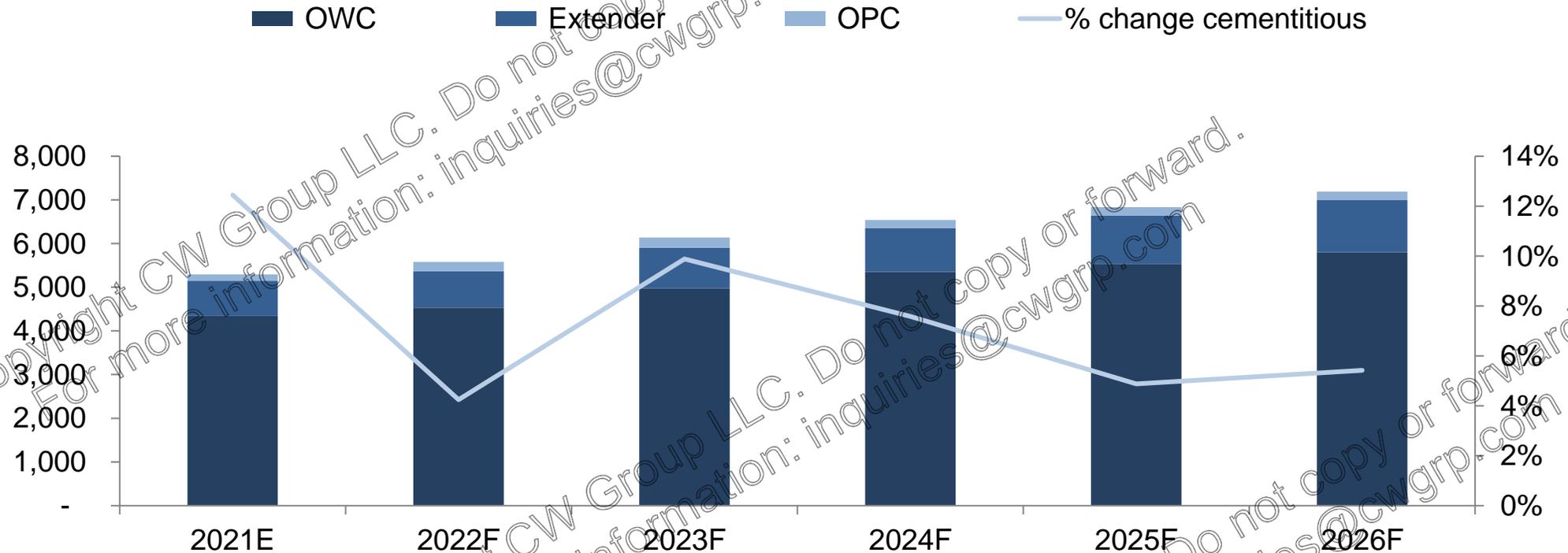
Drilling distance outlook (2021E-2026F) (In million meters)



- The total drilled distance can improve by a minimum CAGR of 4.5 percent in 2026F
- The total drilled distance can improve by a maximum CAGR of 7.1 percent in 2026F
- According to CW estimates, the total drilled distance is expected to reach 187 million meters by 2026F in the base case scenario

The use of extenders is expected to increase globally over the forecast period

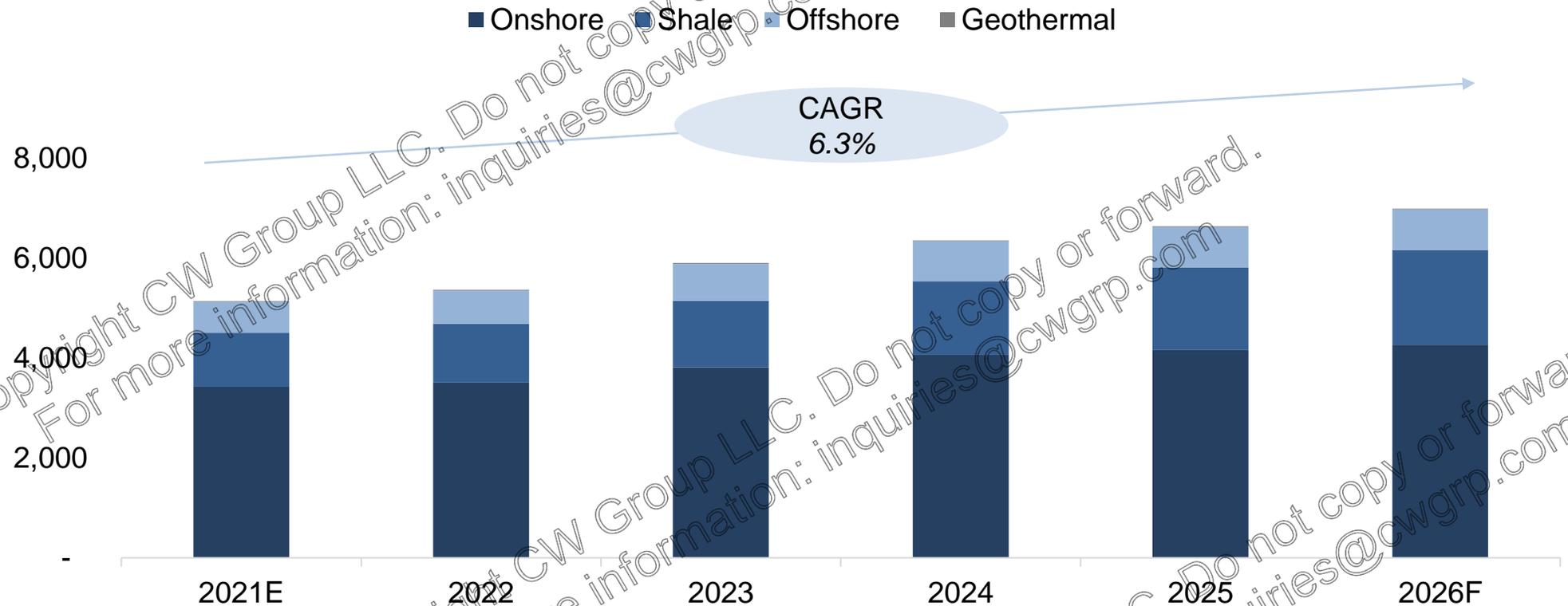
Global new oil well drilled and cementitious forecast (2021E-2026F) (In units)



- The total global well drilled length is expected to improve at a CAGR of 6.0 percent between 2016 and 2021E
- The use of extenders, including fly ash and barite, is expected to increase at a CAGR of 8 percent in the 2021E-2026F period
- Over the 2021E-2026F period, it is forecast that the global drilled distance to grow at a CAGR of almost 6 percent to reach around 190 million meters in 2026F

Shale activity is expected to see the biggest increase in the 2021E-2026F period, followed by offshore drilling

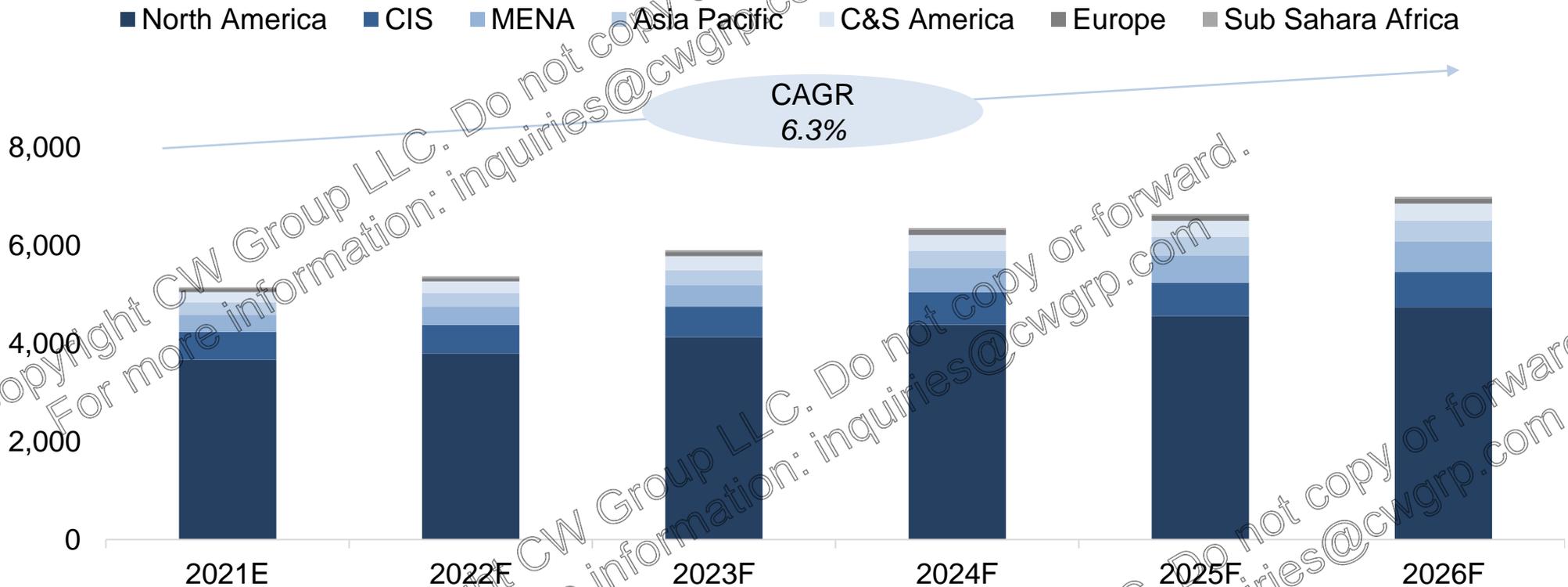
Oil Well Cement consumption by type of well (2021E-2026F)



- Onshore OWC consumption is expected to continue to dominate the majority of OWC consumption in the next five years
- Shale OWC consumption is expected to see a further increase of an estimated 12 percent from 2021E-2026F, mostly due to new exploitation in Central & South America
- For the forecast period, it is estimated that offshore OWC consumption will likely see a recovery

Asia Pacific is expected to see the biggest increase in oil well cement consumption by 2026F

Oil Well Cement consumption by region (2021E-2026F)



- Globally, most markets which registered negative growth rates in terms of OWC consumption between 2016 and 2021E are expected to start to recover in the forecast period after oil prices are estimated to strengthen
- Countries like Saudi Arabia and Iran are expected to experience large OWC consumption average growth rate from 2021E to 2026F
- Large-scale shale well explorations in key countries like Argentina and Saudi Arabia are key drivers for future OWC consumption

Closing remarks

- Economic recovery remains dependent on the successful implementation of vaccines and reforms
- Global crude prices are estimated to see a recovery in 2021 as the economies start to recover
- Well count is estimated to increase more than 15 percent in the 2016-2021E period as economies regain momentum, boosting oil demand
- Global OWC demand is expected to see an increase of double-digits in 2021E after a deep contraction in 2020 due to the pandemic
- Premium OWC prices are expected to still register lower levels in 2021E in most markets in comparison with 2016

About CW Research

CW Research is a leader in syndicated and data-driven market research solutions. The company offers independent perspectives on multiple industrial market segments(e.g., cement, metals & minerals, and specialty chemicals) and deep functional expertise in market intelligence, sourcing intelligence, commodity pricing intelligence.

CW Research also provides custom industry and competitive research programs for operating companies, financial analysts, consultants, governments, suppliers and many others as well as tailored studies together with CW Advisory. For more information: research.cwgrp.com.

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