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Cover Focus

24 System for monitoring real-time drilling operations



Stress Engineering Services, Inc. launches new digital flex joint angle monitoring system. The digital flex joint system uses the core technology of real-time fatigue monitoring system and subsea vibration data logger system; the technology has been leveraged and improved to determine quasi-static and dynamic lower and upper flex joint angles in real-time. Data and power transmission are provided through the mux system; which is first successful system of its kind with minimal drift

25



The NitroForce™ motor improves drilling efficiency and reliability for more productive runs

Halliburton Releases NitroForce™ High Torque, High Flow Drilling Motor. Technology drills faster and saves well time

26 World-first Northern Lights Carbon Capture development in North Sea

The development of the Northern Lights project is made up of several processes. CO2 from industrial sources was first captured, then liquified and transported to an onshore terminal. From there, the liquified CO2 was transferred by pipeline to a subsea offshore permanent storage location in the North Sea. The CCS project is instrumental in helping to reduce CO2 emissions and is a step towards the EU's efforts to limit global warming to 1.5°C above pre-industrial levels



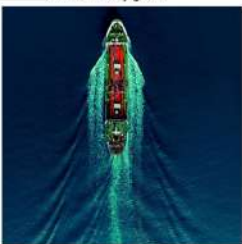
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Modernized drilling-drives package & cooling system on jackup rig
Siemens BlueDrive™ technology is one of several solutions that Siemens can offer in the offshore energy mix for better safety and lower emissions and thus help customers achieve their sustainability goals

69 New analysis show need for rapid pivot to gas

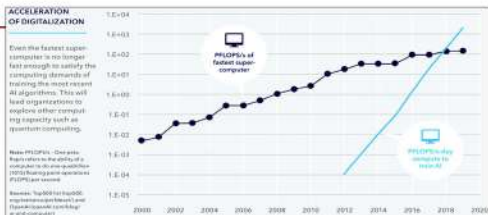
International energy consultancy Xodus Group has launched new analysis showing that a rapid pivot to gas will be required to deal with rising global energy demand. In contrast to some recent future energy scenarios, Xodus believes worldwide energy consumption will continue to increase, driven by economic growth in developing countries, and that approximately half of that demand will need to be fulfilled by natural gas



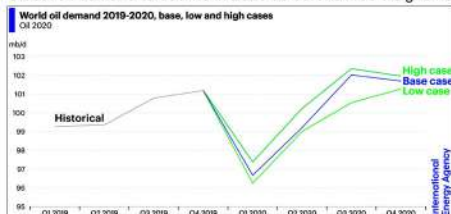
Special Report

30 Acceleration of digitalization

Technology and digitalization are key enablers of the transition to a low carbon energy system. Some technologies will have a greater impact than others in accelerating the transition in the decade ahead. Digital technologies are accelerating and enabling the development of other technologies at a pace never seen before



40 Global oil demand to decline in 2020 as coronavirus weighs heavily on markets



International Energy Agency revises down forecast for global oil demand in 2020 by about 1 million barrels a day

43 Most extreme global oil surplus ever recorded to build up under current conditions: IHS Markit

There has been a dizzying drop in world oil demand and a dramatic pivot in Saudi oil production policy. If this situation persists amidst a recession, it points to the possible buildup of the most extreme global oil supply surplus ever recorded

60 Hydrogen: A key part of a clean and secure energy future

Face to Face

50 PETRONAS stands strong amid challenging market conditions

The year remained difficult as the industry continued to be marred by consistent and prolonged volatility. Against this challenging landscape, PETRONAS has shown strong resiliency through its operational and financial performance for 2019. Our progress and achievements in pursuing our three-pronged strategy demonstrate our perseverance and robustness as an integrated energy company. Tan Sri Wan Zulkiflee Wan Ariffin, President and Group Chief Executive Officer, PETRONAS while talking to DEW Journal.



Expert View

57 Hydrogen energy in India

National Hydrogen Energy Road Map prepared by the Ministry of New and Renewable Energy, Government of India address various aspects of hydrogen as energy/fuel source in India. The main objective of the program is to recognize the routes, which will prompt a gradual acceptance of hydrogen vitality in the nation, accelerating the commercialization and encourage the formation of hydrogen energy infrastructure in the nation, according to Dr Himmat Singh

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