



## Offshore safety and technology

*Technology has brought about significant improvements in the environmental protection and safety records of offshore oil and gas platforms.*

- *Measurement While Drilling (MWD) technology is a major advance in environmental protection and industrial safety. It allows for the detection of potentially unstable or high pressure zones during drilling operations. Installed immediately above the drill bit, MWD technology aids in determining proper positioning to prevent blowouts, casing failures and other potentially serious problems.*
- *Global positioning systems have enabled oil and gas producers to vastly improve the locating of subsurface hazards such as pipelines, ship wrecks and other potential hazards.*
- *Technological advances in extended reach and horizontal drilling allows offshore producers to use fewer platforms, pipelines and other facilities. This new drilling technology also allows for the development of untapped reserves of oil from existing platforms.*
- *Other advances in technology include the use of high resolution inspection and monitoring devices, called smart pigs, that are sent through undersea pipelines to test wall thickness and detect microscopic defects. Remotely operated vehicles equipped with video cameras and other sensing equipment are used to inspect pipelines and offshore platforms.*