

Drilling for oil & gas

Both on land and at sea, oil & gas naturally work their own way up through the earth's crust to the surface. This is usually lost. The supplies on which the world relies are mainly trapped beneath solid rock – often several kilometres underground.



A drill bit

way can reach out to up to 10 km. They also make significantly more contact with the reservoir – which can improve the extraction of oil & gas. More contact means fewer wells need to be drilled in the production field. The costs of this technique, however, are considerably higher. This plays an important role if the amount of oil or gas expected to be found is relatively small.

Advances in drilling techniques have greatly increased the capabilities of production facilities. Other advantages include a reduction in the overall environmental footprint of exploration & producing activities, since operations cover less of the surface and fewer production facilities are needed.



Another benefit is that extended and horizontal drilling can enable production from areas otherwise unreachable, such as reservoirs located beneath sites considered to be of particular environmental sensitivity.

To compound the challenge, many oil & gas reservoirs are found beneath the sea, sometimes below sea beds that are themselves almost two kilometres beneath sea level.

It takes skill and precision and advanced technology to overcome the challenges of hitting a precise geological target from such a distance – even if drilling straight down.

Increasingly, however, it is necessary to drill oil & gas exploration & production wells at an angle – sometimes even almost horizontally at more than 80 degrees from the vertical. Hypothetically, a well drilled in the middle of the Grand' Place in Brussels could easily tap into a reservoir beneath the Berlaymont.

There are several advantages to this drilling technique. Wells drilled in this



A well in Brussel's Grand Place could produce from a reservoir under Berlaymont

About OGP

OGP represents the upstream oil & gas industry before international organisations including the International Maritime Organisation, the United Nations Environment Programme (UNEP), Regional Seas Conventions and other groups under the UN umbrella. At the regional level, OGP is the industry representative to the European Commission and Parliament and the OSPAR Commission for the North East Atlantic. Equally important is OGP's role in promulgating best practices, particularly in the areas of health, safety, the environment and social responsibility.

London office: 209-215 Blackfriars Road, London SE1 8NL, UK Tel: +44 (0)20 7633 0272 Fax: +44 (0)20 7633 2350
Brussels office: 165 Bd du Souverain, B-1160 Brussels, Belgium Tel: +32 (0)2 566 9150 Fax: +32 (0)2 566 9159
Web: www.ogp.org.uk E-mail: reception@ogp.org.uk