## Concepts and conversions

## **RESOURCES**

Petroleum resources are a collective term which embraces technically recoverable volumes of oil, gas and natural gas liquids (NGL). They are broken down into discovered and undiscovered resources, with the former further subdivided into fields and discoveries. By definition, a discovery is made when an exploration well identifies recoverable petroleum. A discovery will be re-defined as a field when its plan for development and operation (PDO) has been approved by the authorities. Undiscovered resources are subdivided into mapped resources (prospects) and unmapped resources (exploration models).

**RESERVES** 

Reserves are defined in accordance with the Norwegian Petroleum Directorate's classification system, and include recoverable volumes of petroleum as specified in approved plans for fields in production or under development. Reserves may be regarded as the economically recoverable part of the petroleum in a field. A distinction is made between original and remaining recoverable reserves.

Estimated resources and reserves change from year to year as a result of new discoveries, production, and adjustments to earlier estimates for fields and discoveries based on new studies or innovations in production technology.

Volumes are given in standard cubic metres (scm) for oil, condensate and gas, and in tonnes for NGL. Total resources, which combine the various types of petroleum, are given in scm of oil equivalent (scm oe).

Total resources and reserves were given earlier in tonnes of oil equivalents (toe).

1 scm oil	=	1.0 scm oe
1 scm condensate	=	1.0 scm oe
1 000 scm gas	=	1.0 scm oe
1 tonne NGL	=	1.9 scm oe

1000 00 htm

1 cubic foot

Uas	i cubic toot	1 000.00	Dtu	
	1 cubic metre	9 000.00	kcal	
	1 cubic metre	35.30	cubic feet	
Crude oil	1 scm	6.29	barrels	
	1 scm	0.84	toe	
	1 tonne	7.49	barrels	
	1 barrel	159.00	litres	
	1 barrel/day	48.80	tonnes/year	
1 barrel/day		58.00	00 scm/year	

	W1	kWh	TCE	TOE	Scm of natural gas	Barrels of oil
1 MJ, megajoule	1	0.278	0.0000341	0.0000236	0.0281	0.000176
1 kWh, kilowatt hour	3.60	1	0.000123	0.000085	0.0927	0.000635
1 TCE, tonne coal equivalent	29 300	8 140	1	0.69	825	5.18
1 TOE, tonne oil equivalent	42 300	11 788	1.44	1	1 190	7.49
1 scm natural gas	35.54	9.87	0.00121	0.00084	1	0.00629
1 barrel of crude oil (159 litres)	5 650	1 569	0.193	0.134	159	1