

# Glossary

- Bidding System:** Combination of bid variable and other lease payment(s) used for allocation of lease rights, e.g., cash bonus bid and fixed royalty.
- Blowout Preventer:** The equipment installed at the wellhead to prevent the escape of pressure.
- Break-up:** The period in the Arctic during which ice in water bodies thaws and breaks up (late May to mid-June for river ice, early July to mid-August for ocean ice. )
- Cash Bonus:** Money paid by a lessee for the execution of an oil and gas lease.
- Casing:** Steel pipe placed in an oil or gas well as drilling progresses to prevent the wall of the hole from caving in during drilling and to provide a means of extracting petroleum if the well is productive.
- Commercial Accumulation:** An occurrence of oil and gas that meets the minimum requirements for size and accessibility to be of commercial interest to a company. The term commercial is frequently synonymous with economic.
- Deferral:** Temporary exclusion of specific offshore areas from leasing.
- Development Well:** A well drilled in proven territory in a field to complete a production pattern.
- Directional Drilling:** Drilling at an angle from the vertical. Directional drilling makes it possible to reach subsurface areas laterally remote, from the point where the bit enters the earth.
- Discovered Resources:** That portion of the oil and gas in the earth whose presence has been physically confirmed through actual exploration drilling.
- Discovery Well:** The first oil or gas well drilled in a new field; the well that reveals the presence of a petroleum-bearing reservoir. Subsequent wells are development wells.
- Drill Ship:** A ship constructed to permit a well to be drilled from it at an offshore location. While not as stable as other floating structures, drill ships are capable of drilling exploratory wells in relatively deep waters.
- Dynamic Positioning:** A method by which a floating offshore drilling rig is maintained in position over an offshore well location. Several motors called thrusters are located on the hulls and are activated by a sensing system, which maintains the rig on location.
- Economic Rent:** Profits from oil and gas development in excess of a firm's normal return to capital.
- Economies of Scale:** Reduction in costs stemming from a larger scale of operations or higher units of production.
- Environmental Impact Statement (EIS):** A document required by the National Environmental Policy Act (NEPA) of 1969 or similar State law in relation to any action significantly affecting the environment.
- Fair Market Value:** Price a property brings in a competitive market where either party to the transaction has the freedom to reject the offer.
- Freeze-up:** The period in the Arctic during which lakes, rivers, and other water bodies freeze.
- Indicated Reserves:** Known oil and gas that is currently producible but cannot be estimated accurately enough to qualify as proved.
- Inferred Reserves:** Reserves that are producible but the assumption of their presence is based on limited physical evidence and considerable geologic extrapolation. This places them on the borderline of being undiscovered. The accuracy of the estimate is very poor.
- In Place:** All of the oil and gas in the reservoir, combining both the recoverable and nonrecoverable portions.
- Ice Leads:** Large openings in sea ice.
- Jack-up Drilling Rig:** An offshore drilling structure with tubular or derrick legs that support the deck and hull. When positioned over the drilling site, the bottoms of the legs rest on the surface. A jack-up rig is towed or propelled to a location with its legs up. Once the legs are firmly positioned on the bottom, the deck and hull height are adjusted and levelled.
- Landfast Ice Zone:** The area extending from the shore and consisting of two sub-zones: bottomfast ice, where sea ice is frozen to the bottom, and floating fast ice, seaward of the bottomfast ice and extending outward from shore.
- Lease:** A contract authorizing exploration for and development and production of oil and gas in a specific offshore tract.
- Lease Sale:** Competitive auction for offshore leases by sealed bid.
- Leasing System:** Combination of bidding systems and other leasing conditions (terms, tract size, etc. ) used in offshore leasing.
- Lease Term:** Period of time granted for offshore lease rights.
- Lease Tract:** Geographical and legal extent of a single offshore lease area.
- Lessee:** Firm or group of firms holding lease rights.

**Marginal Field:** Recoverable reserves of oil and gas which are barely profitable to produce.

**Minimum Economic Field Size:** Recoverable reserves of oil and gas which are needed to assure profitable production.

**Moratoria:** Temporary exclusion of specific offshore areas from leasing.

**Net Present Value:** Total combined value in current dollars of future costs and revenues associated with a project.

**Oil Basin:** A large basin-like geologic structure in which oil and gas fields will be found.

**Oil Field:** A geologic unit in which one or more individual, structurally and geologically related reservoirs are found.

**Oil Region:** A large oil-bearing area in which oil basins and fields are found in close proximity.

**Pack Ice Zone:** The area in which sea ice consists predominantly of multi-year floes; the area in which ice does not melt annually.

**Permafrost:** Permanently frozen ground.

**Profit Share:** Lease payment based on percentage of net income or profits from oil and gas production.

**Proved Reserves:** An estimate of oil and gas reserves contained primarily in the drilled portion of fields. The data to be employed and the method of estimation are specified so that the average error will normally be less than 20 percent. May also be called measured reserves.

**Rent:** Money paid by a lessee for the right to occupy an offshore tract.

**Reservation:** Offshore area permanently withdrawn from leasing.

**Reservoir:** A natural underground container of hydrocarbons.

**Reserves:** Oil and gas that has been discovered and is producible at the prices and technology that existed when the estimate was made.

**Resource Base:** The total amount of oil and gas that physically exists in a specified volume of the earth's crust.

**Resources:** The total amount of oil and gas including reserves that is expected to be produced in the future.

**Royalty:** Lease payment based on percentage of gross income or total value of oil and gas produced.

**Semi-submersible Drilling Rig:** A floating offshore drilling structure that has hulls submerged in the water but not resting on the seafloor. Semi-submersible rigs are either self-propelled or towed to a drilling site and either anchored or dynamically positioned over the site or both. Semi-submersibles are more stable than drill ships and are used extensively to drill wildcat wells in rough waters such as the North Sea.

**Shorefast Ice Zone:** Two subzones of ice; bottomfast ice, where sea ice is frozen to the bottom, and floating fast ice, seaward of bottomfast ice.

**Sliding Scale Royalty:** Lease payment based on a royalty rate which increases with the amount of oil and gas production.

**Subeconomic Resources:** Oil and gas in the ground that are not producible under present prices and technology but may become producible at some future date under higher prices or improved technology.

**Submersible Drilling Rig:** An offshore drilling structure with several compartments that are flooded to cause the structure to submerge and rest on the seafloor. Most submersible rigs are used only in shallow waters.

**Tundra:** A rolling, treeless, often marshy plain.

**Undiscovered Resources:** Resources which are estimated totally by geologic speculation with no physical evidence through drilling available.

**Windfall Profits Tax:** Tax on profits from oil and gas development brought about by increased prices which are not accompanied by increased costs.

**Withdrawal:** Permanent exclusion of specific offshore areas from leasing.

**Work Commitment:** Extent of exploration on an offshore lease to be carried out by the lessee.