

## The World Floating Production Report 2005-2009

**Description:** The fifth edition of this acclaimed business study. Floating production has proved a cost-effective method of developing both marginal and world-class offshore fields worldwide. In the past five years, 69 floating production units of varying types have been installed. In the next five years, we forecast the installation of a further 110 floaters. The World Floating Production Report provides an essential overview of current and future prospects over the 2005-2009 period. The report also includes access to the World Floating Production Database.

### Future Prospects

The World Floating Production Report provides the industry executive with an overview of future prospects within the floating production sector. The World Floating Production Report covers all types of floaters; FPSOs, FPSSs, spars, TLPs, etc. and is unique in providing an essential overview of the FPS business, the technology and a forecast of global markets.

### Technology Overview

The report looks at the technologies involved in each sector of the floating production industry. The economic rationale for use of floaters and their evolution is explained. The current floating production market is analysed together with factors affecting supply and demand including re-deployment issues and regional disparities. Existing designs of floater and new innovative concepts are described, together with the factors driving innovation in this dynamic market sector.

### Market Forecasts

The World Floating Production Report uses a specially developed market model to generate forecasts of numbers of floating production systems in each region of the world. Data is shown by region and covers the period to 2009.

A major factor in determining future FPSO expenditure is whether fields will be developed by upgrading and re-deploying existing units, by tanker conversions or by newbuilds. The report provides estimates of levels of future activity and expenditure in each of these categories.

The World Floating Production Report provides essential information for decision-makers in oil companies and in the contracting and supply industries, government departments and financial institutions.

### Contents:

1. SUMMARY & CONCLUSIONS
  - 1.1 INTRODUCTION
  - 1.2 SUMMARY
    - 1.2.1 The Development of the FPS Sector
    - 1.2.2 The Global FPS Fleet
    - 1.2.3 Market Drivers & Supply Factors
    - 1.2.4 Future Prospects to 2009
    - 1.2.5 Challenges Facing the FPS Market
  - 1.3 CONCLUSIONS
- 2 FLOATING PRODUCTION SYSTEMS
  - 2.1 INTRODUCTION
  - 2.2 FLOATING PRODUCTION, STORAGE AND OFFLOADING VESSELS (FPSOS)
    - 2.2.1 Regional Distribution of FPSOs
    - 2.2.2 Future FPSO Prospects 2005-2009
    - 2.2.3 FPSO Operators 2000-2009
    - 2.2.4 Production Barges
  - 2.3 FLOATING PRODUCTION SEMI-SUBMERSIBLES (FPSSS)
    - 2.3.1 Regional Distribution of FPSSs
    - 2.3.2 FPSS Operators
    - 2.3.3 Future FPSS Prospects 2005-2009

- 2.4 TENSION LEG PLATFORMS (TLPS)
  - 2.4.1 TLP Deployments to Date
  - 2.4.2 Mini-TLPS
  - 2.4.3 Future TLP Projects 2005-2009
  - 2.4.4 TLP Operators
- 2.5 SPAR PRODUCTION UNITS
  - 2.5.1 Spar Deployments to Date
  - 2.5.2 Truss Spars
  - 2.5.3 Future Spar Prospects 2005-2009
  - 2.5.4 Spar Operators
- 2.6 SUMMARY
- 3 FPS APPLICATIONS, DRIVERS & ALTERNATIVES
  - 3.1 FPS APPLICATIONS
    - 3.1.1 Extended Well Tests
    - 3.1.2 Early Production Systems
    - 3.1.3 Life-of-Field Production
    - 3.1.4 Development Hubs
  - 3.2 FPS DRIVERS
    - 3.2.1 Subsea Production Technologies
    - 3.2.2 The Move into Deep Water
    - 3.2.3 Marginal Field Developments
    - 3.2.4 Fast-Track and Phased Developments
  - 3.3 ALTERNATIVES TO FLOATING PRODUCTION
    - 3.3.1 Compliant Towers
    - 3.3.2 Long-Distance Subsea Tiebacks
    - 3.3.3 Subsea Processing and Pressure Boosting
    - 3.3.4 Control Buoys
- 4 TOPSIDES FACILITIES
  - 4.1 FACTORS IMPACTING ON FPS TOPSIDES DESIGN
    - 4.1.1 Space
    - 4.1.2 Weight
  - 4.2 TOPSIDES FUNCTIONS
  - 4.3 PRODUCTION PROCESSING & EXPORT
    - 4.3.1 Separation
    - 4.3.2 Oil Treatment
    - 4.3.3 Gas Treatment
    - 4.3.4 Water Treatment
    - 4.3.5 Metering Systems
    - 4.3.6 Slugging
    - 4.3.7 Sand
  - 4.4 INJECTION & FLOW ASSURANCE FUNCTIONS
    - 4.4.1 Water Injection
    - 4.4.2 Gas Injection
    - 4.4.3 Gas Lift
    - 4.4.4 Flow Assurance Functions
    - 4.4.5 Chemical Injection
    - 4.4.6 Flowline Heating Systems
    - 4.4.7 Pigging
  - 4.5 WELLHEAD & DRILLING FUNCTIONS
    - 4.5.1 Spars & TLPs
    - 4.5.2 FPSSs
    - 4.5.3 Platform Rigs
  - 4.6 UTILITIES & ACCOMMODATION
    - 4.6.1 Utilities
    - 4.6.2 Accommodation
  - 4.7 TOPSIDES INSTALLATION
- 5 MOORINGS & RISERS
  - 5.1 INTRODUCTION
  - 5.2 MOORING SYSTEMS
    - 5.2.1 Catenary or Spread Mooring Systems
    - 5.2.2 Differentiated Compliance Anchoring System (DICAS)

- 5.2.3 Taut-Leg and Semi-Taut Moorings
- 5.2.4 Tension Leg Moorings
- 5.2.5 Composite Tethers
- 5.2.6 Dynamic Positioning
- 5.2.7 Turret Mooring Systems
- 5.2.8 Suction Anchors
- 5.2.9 Vertically Loaded Anchors
- 5.2.10 Polyester Rope Mooring Lines
- 5.3 RISER TECHNOLOGIES
  - 5.3.1 Overview
  - 5.3.2 Top-tensioned Risers
  - 5.3.3 Flexible Risers
  - 5.3.4 Steel Catenary Risers
  - 5.3.5 Hybrid Risers
  
- 6 THE SUPPLY OF FPS UNITS
  - 6.1 INTRODUCTION
    - 6.1.1 The Influence of Globalisation on the Supply of FPS Units
    - 6.1.2 The Issue of Local Content
  - 6.2 FPS NEWBUILDS
  - 6.3 FPS CONVERSIONS
    - 6.3.1 FPSO Conversions
    - 6.3.2 FPSS Conversions
  - 6.4 FPS UPGRADE & REDEPLOYMENT
    - 6.4.1 De-bottlenecking & Refurbishment
    - 6.4.2 FPS Substitution
    - 6.4.3 Redeployment Candidates 2005-2009
  - 6.5 FPS CONSTRUCTION & CONVERSION PROBLEMS
    - 6.5.1 Examples and Contributing Factors
    - 6.5.2 Changes in Vessel Specifications
    - 6.5.3 Cultural Differences
    - 6.5.4 Interface Management
    - 6.5.5 The EPIC Risk Burden
  - 6.6 FPS LEASING
    - 6.6.1 Why Lease?
    - 6.6.2 Vessels & Dayrates
    - 6.6.3 Major Leasing Contractors
  
- 7 FLOATING STORAGE AND OFFLOADING VESSELS
  - 7.1 INTRODUCTION – WHY FSOS ARE USED
    - 7.1.1 FSO Development Scenarios
    - 7.1.2 FSO Mooring Systems
  - 7.2 FSO SUPPLY OPTIONS
  - 7.3 FSO LEASING
  - 7.4 THE GLOBAL FSO FLEET
    - 7.4.1 Historical Overview
    - 7.4.2 Historic and Future FSO Installations by Region
  
- 8 INNOVATIVE FLOATING PRODUCTION CONCEPTS
  - 8.1 INTRODUCTION – THE DRIVERS FOR INNOVATION
    - 8.1.1 The Time Lag Factor
    - 8.1.2 Concept Selection
  - 8.2 CONCRETE-HULLED FPS UNITS
    - 8.2.1 Initial Applications
    - 8.2.2 Concrete FPSOs
  - 8.3 SEMI-SUBMERSIBLE DESIGNS (FPSSS)
    - 8.3.1 GustoMSC's FPU-40-DT
    - 8.3.2 Technip's Extendable Draft Platform (EDP)
    - 8.3.3 GVA Consultants' 4000 ASU Semi-Submersible
  - 8.4 TLP DESIGNS
    - 8.4.1 Extended TLP
    - 8.4.2 Aker Kvaerner's Mini-TLP
  - 8.5 SPARS

- 8.5.1 Technip's Cell Spar
- 8.5.2 ABB's Single Column Floater
- 8.6 FPDSOS
  - 8.6.1 Bouygues' Multifunction Barge
  - 8.6.2 SBM's Tension Leg Deck FPDSO
  - 8.6.3 SBM's Floating Production and Workover Unit (FPWU)
- 8.7 OTHER CONCEPTS
  - 8.7.1 Sevan Marine's SSP
  - 8.7.2 Petrobras' Monobr
  - 8.7.3 Dynamic Position Mooring
  - 8.7.4 IHC Caland's DP-FPSO
  - 8.7.5 Gulf Island's MinDOC
  - 8.7.6 ADTH's Atlantis
  - 8.7.7 OPE's Satellite Services Platform
- 8.8 FLOATING LNG & GTL FACILITIES
  - 8.8.1 Introduction
  - 8.8.2 Floating GTL Initiatives
  - 8.8.3 Floating LNG Initiatives
- 9 GLOBAL & REGIONAL OVERVIEW OF THE FPS SECTOR
  - 9.1 INTRODUCTION
  - 9.2 THE GLOBAL FPS FLEET BY REGION
  - 9.3 THE GLOBAL FPS FLEET BY VESSEL TYPE 2000-2009
  - 9.4 WATER DEPTH DISTRIBUTION OF THE GLOBAL FPS FLEET 2000-2009
    - 9.4.1 The Deepwater Segment
  - 9.5 MAJOR OPERATORS IN THE FPS SECTOR 2005-2009
  - 9.6 AFRICA
    - 9.6.1 Overview of the African FPS Sector
    - 9.6.2 The Importance of Deep Water
    - 9.6.3 African FPS Prospects 2005-2009 by Country
  - 9.7 ASIA
    - 9.7.1 Overview of the Asian FPS Sector 2000-2009
    - 9.7.2 Asian FPS Prospects 2005-2009 by Country
  - 9.8 AUSTRALASIA
  - 9.9 LATIN AMERICA
    - 9.9.1 Overview of the Latin American FPS Sector 2000-2009
    - 9.9.2 Brazilian FPS Prospects 2005-2009
  - 9.10 NORTH AMERICA
    - 9.10.1 Overview of the North American FPS Sector
    - 9.10.2 Deepwater Activity in the US Gulf of Mexico
    - 9.10.3 North American FPS Prospects 2005-2009
    - 9.10.4 FPSOs and the US Gulf of Mexico
  - 9.11 WESTERN EUROPE
    - 9.11.1 Overview of the Western European FPS Sector
    - 9.11.2 Western European FPS Prospects 2005-2009 by Country
- 10 FPS CASE STUDIES
  - 10.1 INTRODUCTION
  - 10.2 BP'S GREATER PLUTONIO (AFRICA)
    - 10.2.1 Background
    - 10.2.2 Field development
    - 10.2.3 Flowlines, Risers and Umbilicals
  - 10.3 CHEVRONTEXACO'S AGBAMI (AFRICA)
    - 10.3.1 Background
    - 10.3.2 Development and Contracting Strategy
    - 10.3.3 FPSO
  - 10.4 UNOCAL'S WEST SENO (ASIA)
    - 10.4.1 Background
    - 10.4.2 Exploration and Appraisal Drilling
    - 10.4.3 Development Scheme
    - 10.4.4 Production Facilities
    - 10.4.5 Tender-Assisted Development Drilling
    - 10.4.6 Further Developments

- 10.5 CONOCO PHILLIPS' PENGLAI (ASIA)
  - 10.5.1 Background
  - 10.5.2 Exploration and Appraisal Drilling
  - 10.5.3 Development Scheme
- 10.6 KIKEH (ASIA)
  - 10.6.1 Background
  - 10.6.2 Development Drilling
  - 10.6.3 Spar DCU
  - 10.6.4 FPSO
- 10.7 PETROBRAS' MARLIM SUL – P-51 (LATIN AMERICA)
  - 10.7.1 Background
  - 10.7.2 Development Scheme
  - 10.7.3 P-51 - Marlim Sul FPSS
  - 10.7.4 Subsea/Mooring/Export
- 10.8 KERR MCGEE'S RED HAWK (NORTH AMERICA)
  - 10.8.1 Background
  - 10.8.2 The Red Hawk Cell Spar
  - 10.8.3 Mooring System
  - 10.8.4 Subsea Facilities & Export Systems
- 10.9 HUSKY'S WHITE ROSE (NORTH AMERICA)
  - 10.9.1 Background
  - 10.9.2 Sea Rose FPSO
  - 10.9.3 Mooring & Installation
  - 10.9.4 Subsea & Drilling
  - 10.9.5 Pipelines, Umbilicals and Export System
  - 10.9.6 Expansion to Gas
- 10.10 STATOIL'S KRISTIN (WESTERN EUROPE)
  - 10.10.1 Background
  - 10.10.2 Development Scheme
  - 10.10.3 The Kristin FPSS
  - 10.10.4 Development Drilling
  - 10.10.5 Subsea Facilities
  
- 11 The Floating Production Market 2005-2009
  - 11.1 Introduction
  - 11.2 The Forecasting Process
  - 11.3 Pricing Procedures
  - 11.4 The Potential for Upside
    - 11.4.1 The Effect of Ongoing Exploration
    - 11.4.2 Prospects with No Identified Development Scheme
    - 11.4.3 Compensating for Prospect Invisibility
  - 11.5 Timing of Installation and Expenditure Forecasts
    - 11.5.1 Year of Installation
    - 11.5.2 Order Year
  - 11.6 FPSOS
  - 11.7 Forecast FPSO Installations by Supply Type
  - 11.8 FPSS
  - 11.9 Forecast FPSS Installations by Supply Type
  - 11.10 Spars
  - 11.11 TLPS
  - 11.12 FSOS
  - 11.13 Africa
  - 11.14 Asia
  - 11.15 Australasia
  - 11.16 Latin America
  - 11.17 North America
  - 11.18 Western Europe
  - 11.19 The Global Fps Market by Vessel Type
  - 11.20 The Global Fps Market by Region
  - 11.21 Leading Operators in the Fps Market
  - 11.22 The Deepwater Fps Market

Ordering: Order Online - <http://www.researchandmarkets.com/reports/350474/>

Order by Fax - using the form below

Order by Post - print the order form below and sent to

Research and Markets,  
Guinness Centre,  
Taylors Lane,  
Dublin 8,  
Ireland.

---

**Fax Order Form**

To place an order via fax simply print this form, fill in the information below and fax the completed form to 646-607-1907 (from USA) or +353 1 6849977 (from Rest of World). If you have any questions please visit

<http://www.researchandmarkets.com/contact/>

**Order Information**

Please verify that the product information is correct.

Product Name: The World Floating Production Report 2005-2009  
Web Address: <http://www.researchandmarkets.com/reports/350474/>  
Office Code: OCDKLINSUR

**Product Format**

Please select the product format and quantity you require:

Quantity  
Hard Copy:  EURO €3,872.00

\* Shipping/Handling is only charged once per order.

**Contact Information**

Please enter all the information below in **BLOCK CAPITALS**

Title: Mr  Mrs  Dr  Miss  Ms  Prof

First Name: \_\_\_\_\_ Last Name: \_\_\_\_\_

Email Address: \* \_\_\_\_\_

Job Title: \_\_\_\_\_

Organisation: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_

Postal / Zip Code: \_\_\_\_\_

Country: \_\_\_\_\_

Phone Number: \_\_\_\_\_

Fax Number: \_\_\_\_\_

\* Please refrain from using free email accounts when ordering (e.g. Yahoo, Hotmail, AOL)

**Payment Information**

Please indicate the payment method you would like to use by selecting the appropriate box.

- Pay by credit card:
- American Express
- Diners Club
- Master Card
- Visa

Cardholder Name \_\_\_\_\_

Expiry Date \_\_\_\_\_ | \_\_\_\_\_

Card Number \_\_\_\_\_

CVV Number \_\_\_\_\_

Issue Date \_\_\_\_\_ | \_\_\_\_\_

(for Diners Club only)

- Pay by check:

Please post the check, accompanied by this form, to:

Research and Markets,  
Guinness Center,  
Taylors Lane,  
Dublin 8,  
Ireland.

- Pay by wire transfer:

Please transfer funds to:

Account number	833 130 83
Sort code	98-53-30
Swift code	ULSBIE2D
IBAN number	IE78ULSB98533083313083
Bank Address	Ulster Bank, 27-35 Main Street, Blackrock, Co. Dublin, Ireland.

If you have a Marketing Code please enter it below:

Marketing Code: \_\_\_\_\_

---

Please fax this form to:  
**646-607-1907 - From USA**  
**+353 1 6849977 - From Rest of World**