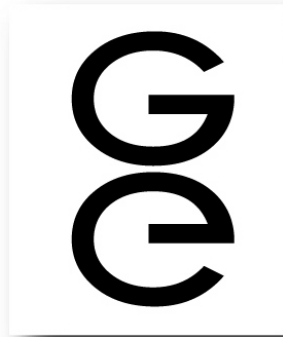


# Strategic Choices, 2008



GORDON ENERGY  
SOLUTIONS

## Total S.A.

**A Peer Analysis Service Evaluation and  
Forecast**

**18 August 2008**

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## Overview of Company Strategy and Goals

### Strategic Patterns of Behavior

Among the large integrated oil companies with significant international programs, Total pioneered volumetric growth as a central strategic goal.

In its pursuit of growth, Total has focused on gaining access to already demonstrated resources and a willingness to accept relatively high levels of commercial uncertainty as the price it must pay for this access. The company has also been adept at capitalizing on its political advantages as a French company.

**While Total's strategy has succeeded by many standards, the capacity to repeat this success is more limited in the environment that has emerged in the last five years. We believe that a key agent of change has been the progressive erosion of the competitive advantage initially gained as a first mover in its pursuit of a growth-driven production deal strategy. This agent of change is still very much at work.**

In some respects this erosion was a clear force for change as early as late 1998 when the company acquired PetroFina and again in 1999 with the Elf merger. The importance of the Elf deal has been critical, providing a very large part of the upside in Total's portfolio since the merger. This has been particularly evident in West Africa where Total was a minor player and, specifically, in the deepwater where Total was not a serious player. However, like the Amoco assets acquired by BP, the assets acquired in the Elf deal have matured as have other key elements of Total's production portfolio (gas supply to the Bontang LNG plant is a clear case).

**We believe that Total is again facing a fundamental challenge with respect to how it will maintain its growth-focused program in the years ahead.** Several key moves in the company's new business development focus should be seen as a reaction to this re-emergent challenge including operations to build a position in Australia, entry into Canadian oil sands and the Synenco acquisition, and a number of grass roots licensing efforts such as in Malaysia and Vietnam. The severity of the challenge to Total has increased. By the late 1990's competition was primarily from the other IOCs as they imitated Total. Now, the sources of competition are much more diverse. The IOCs continue to be as hungry as Total and compete in much the same way and in most of the same places. Compounding this is the growing competition from the NOCs internationally and the re-emergence of resource nationalism and the resulting restrictions on access.

**If the company's business development efforts do not yield significant results in the near to medium-term there is a high likelihood that Total will make another major acquisition to fill the gap.** One opportunity may emerge if oil prices continue to fall. In this case it is to be expected that share prices of independent producers will take a relatively greater beating than the global peer group's shares. Total will probably be particularly interested in companies with significant positions in West Africa, Europe or Australia. There are also companies active internationally that not purely independents which could be of very great value to Total's long-term program. In addition, exchange rates are a potential driver of another deal for companies trading in US dollars.

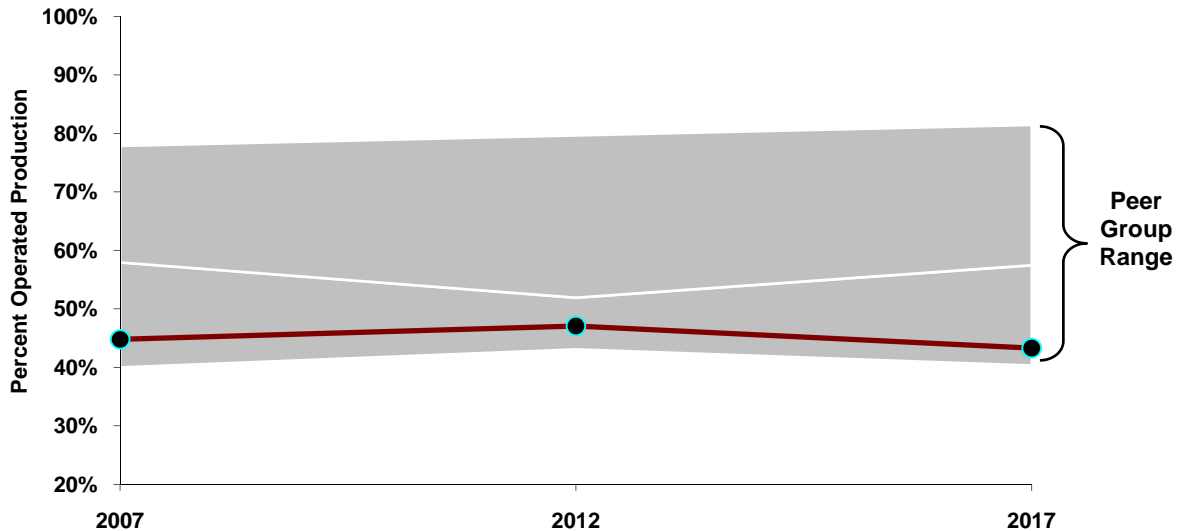
### Operated and Non-Operated Production

Reflecting its origins and the very large role played by European operations, operated production is a relatively small share of Total's current portfolio and, as shown below, will remain low compared to its peer group in each forecast period.

This is true despite the company's expectations that 80% of new production through 2010 will be operated.

Total ranks in the bottom half of the peer group in 2007 and in each of the five year ahead forecast periods.

### Percent of Production Operated



Source: GES Projects and Corporate Model Databases

### Implementation

Total has distinguished itself from many of its peers in the manner in which it works with National Oil Companies and their governments. The company specifically highlights the role of “innovative contractual schemes and strategic partnerships” in their upstream strategy.

Initially this approach manifested itself primarily as the acquisition of directly negotiated production deals. These production deals have been Total's central tool for achieving its goals. Other, less conventional applications of this approach include Total's participation in the Iranian buyback contracts. More recently, the Shtokman Special Purpose Vehicle (SPV) agreement stands out. Also, this year Total farmed out part of its license interests in Mauritania to Sonatrach and Qatar Petroleum International. The degree to which this approach has worked for Total is debatable. One can reasonably argue that, after the earlier production deals, the more conventional Elf acquisition has more profoundly shaped Total's performance and current status.

Exploration plays an important role but largely in two relatively lower risk forms: (1) as a means of adding reserves in or around legacy positions (success in the Mahakam Block area or around Total's UK producing assets are two key examples) or (3) as a tool to add resources in areas acquired through production deals or acquisitions (West Africa is the most clear case of success in this effort).

### Operational Goals and Targets

Total's key upstream operational targets include:

- 4% compound average rate of growth of worldwide output through 2010,
- Maintain a 12 year ratio of proved reserves to production, i.e., increase reserves at the same average rate as production,
- Increase upstream portfolio diversification,
- Reduce the relative role of fixed margin assets in the upstream portfolio

### **Feasibility Assessment**

The results presented in this report indicate that the targeted 4% production growth rate through 2010 is achievable but only if the company is able to make significant reserve additions through its ongoing efforts. Moreover, after 2013 production falls short of this growth target. As global production increases, the relative role of fixed margin assets (primarily the essentially fixed volumes produced in the UAE) will naturally fall.

Total's production replacement target is more ambitious than most companies in the peer group. The capacity to achieve this target hinges on a large number of risk factors that are not generally in the company's control.

**Results in the following areas are critically important to Total's success and progress in these efforts should be closely watched:**

- **Progress at the Ichthys and Brass River LNG projects, including demonstration of additional Australian reserves in licenses near Ichthys, is essential as these are expected to contribute nearly 8% of total new source boe output through 2030**
- **The multi-phase oil sands projects at Surmont and Joslyn account for 26% of future new source output and, just as importantly, are a major source of potential long-term stability in the company's oil production base**
- **Resolution of current uncertainties as to the company's long-term position in Venezuela**
- **Substantial drilling success (such as the recent Sangos-1 discovery) on the recently acquired deepwater blocks 15/06 (15%) and 17/06 (30% and operator) blocks could add longer-term stability to the company's position in West Africa**

## Growth & Performance Forecast

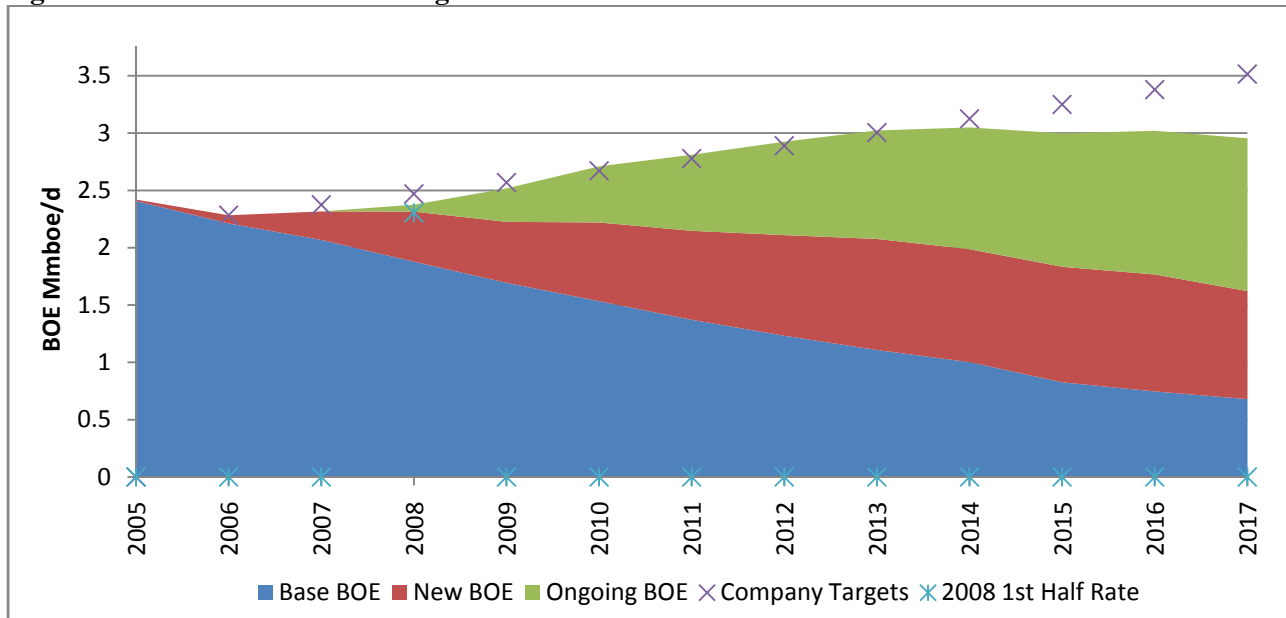
### Production Outlook

Based on our analysis of Total’s portfolio, GES anticipates that, company output will rise to a plateau of 3 Mmboe/d by 2013. This plateau is projected to be sustained through the end of the forecast period.

The GES net production forecast is generated based on a US\$70 WTI and US\$9.90 Henry Hub mid-cycle price case. The results are shown in Figure 1 and incorporate the effects of the most recent delay in startup of Kashagan production and the reduction in working interest that has occurred. The results are very consistent with Total’s growth target of 4% average annual increase over the near to medium-term. However, two caveats should be noted:

- Base production assets and identified new projects are not sufficient to meet Total’s targets and, in fact, after 2008 combined output from these two sources slowly declines
- The data clearly point to future shortfalls after 2013 from the current mix of assets

**Figure 1: Volumetric Growth Targets and the GES Production Forecast**



Source: GES Corporate Models Database

The average annual rate of decline of Total’s base production is projected to be 10% both in the near-term (through 2012) and the longer-term (through 2017). Recognizing that some portion of production allocated to ongoing operations is associated with maintenance investments for base operations, the actual decline rate is likely to be somewhat lower. The company has published estimates of a 3% to 4% rate of decline of base output.

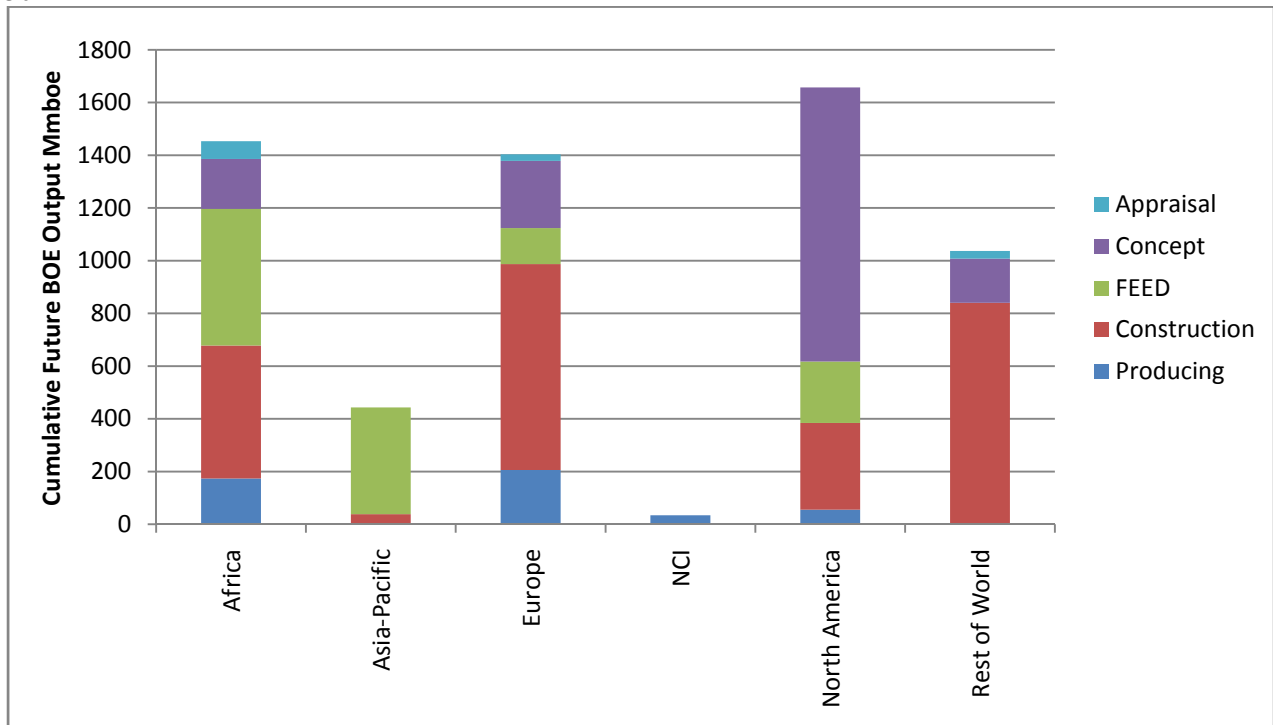
Meeting the company’s production targets hinges on successful completion of a broad range of projects in the near-term to medium-term.

There are two important features of Total’s new project portfolio that have a bearing on risk exposure.

- The portfolio, and our forecast, includes multiple instances of multi-phase or correlated projects. Key cases in point are
  - the oil sands program,
  - Kashagan
- Many of the projects in Africa and North America that will enable Total to meet its production and reserve additions targets are not yet under construction and many have also not achieved Final Investment Decision (FID) status.

Figure 2 shows, by region, projected cumulative net new source output through 2030 (essentially reserves) in each of five stages of development. These stages, in order of decreasing certainty are: Producing (but not at expected peak), Construction, FEED, Concept and Appraisal.

**Figure 2: Relative Certainty of the New Source Production Portfolio, Cumulative Net Output 2008-30**



Source: GES Projects and Corporate Model Databases

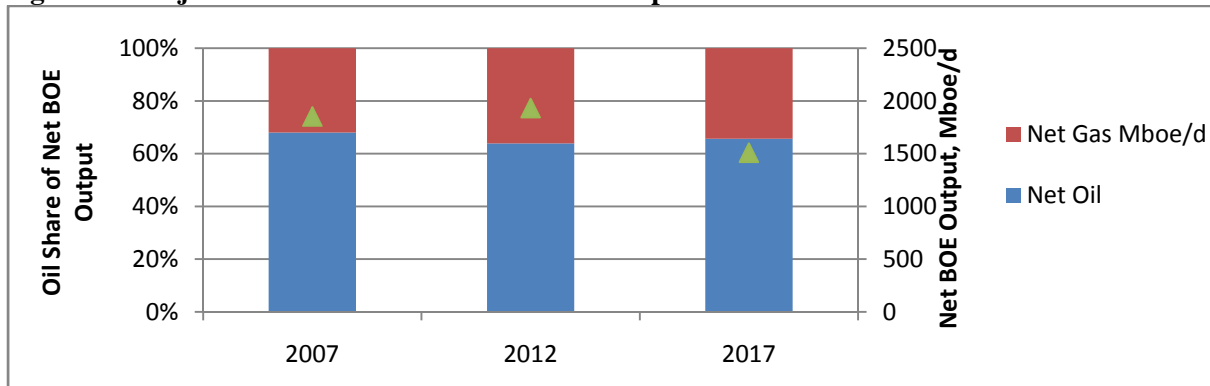
Two areas supplying very high future production and with high shares of this future output in less certain stages of progression are Africa and North America. In addition, while prospective volumes from Asia are much lower the proportion of early stage volumes is very high. Moreover, the potential upside in Australia is not fully reflected here. North American operations play a particularly large role in Total’s future oil production.

In the current industry environment, cost inflation, delays and unilateral government policy changes are important sources of risk. In addition, as project lead times to production stretch out, the potential for misjudging prices at the time of production will also be a source of risk. Projects in the FEED or earlier stages of development in the portfolio are more exposed to these commercial risks.

### Oil/Gas Mix

Figure 3 shows GES forecasts of the future oil/gas mix in Total’s worldwide production. Despite the importance of LNG to Total’s ongoing strategy, throughout the forecast period natural gas contributes slightly less than 40% of total output.

**Figure 3: Projected Oil/Gas Mix in Worldwide Output**

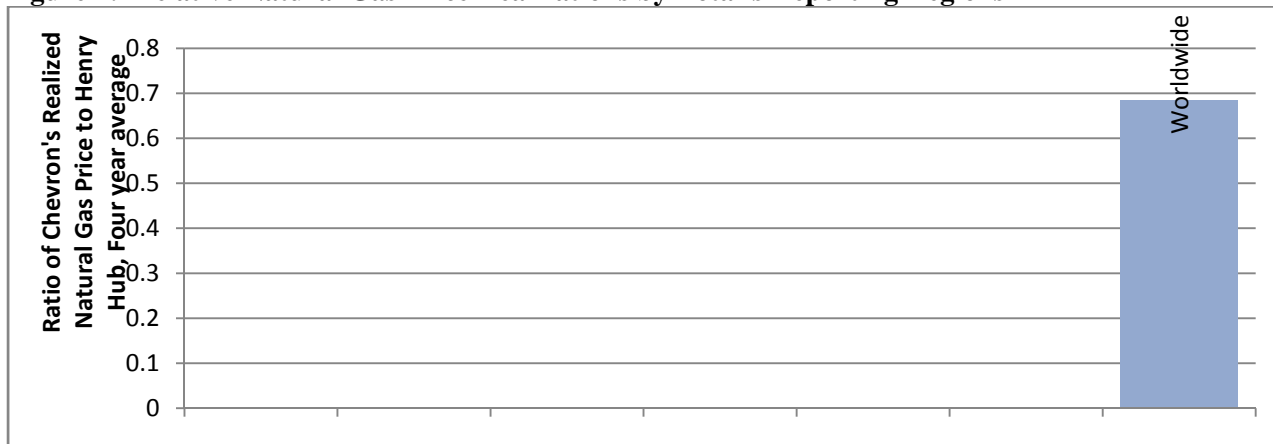


Source: GES Corporate Models and Company Production Source Databases; Includes all modeled legacy and new source projects but excludes projected output from ongoing operations

The high oil content of Total’s production base is due to a number of factors. First, many of the largest producing countries in Total’s current portfolio are dominated by liquids. These include Equity Affiliate operations in the UAE, Angola and Nigeria. The UAE was the second largest source of Total’s boe output last year with oil contributing 84%. Oil will continue to play a major role in the future due, to a large degree, to future oil sands projects.

Figure 4 shows the four-year average ratio of realized natural gas prices in Total’s reporting regions to Henry Hub. The company does not report this detail by region.

**Figure 4: Relative Natural Gas Price Realizations by Total’s Reporting Regions**

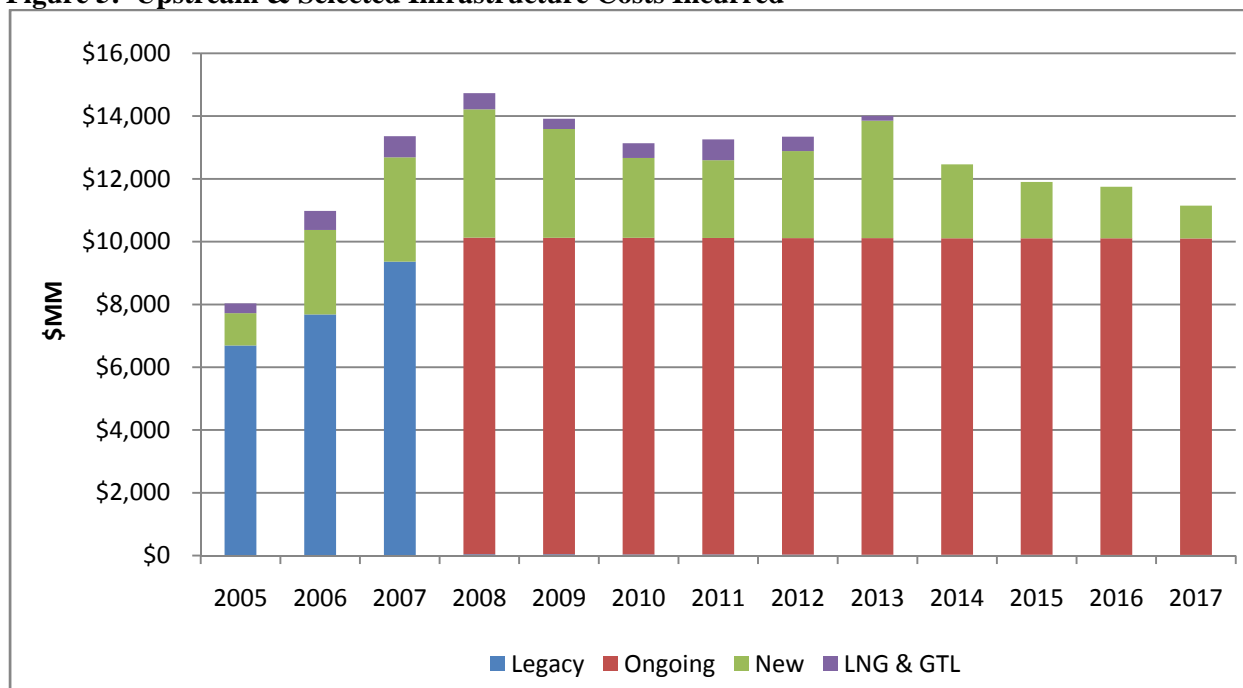


Source: GES Corporate Models Database; Company Statistical Supplements

### Capital Spending

Estimated liquefaction plant investments are included in Figure 5. Expenditures for vessels and for LNG terminals in destination markets are not included. Upstream spending increased from US\$8 billion in 2005 to US\$13 billion by 2007. After rising again in 2008 we project an extended plateau at or around US\$13 billion through 2013.

**Figure 5: Upstream & Selected Infrastructure Costs Incurred**



Source: GES Corporate Models Database; Company Annual Reports and Supplements

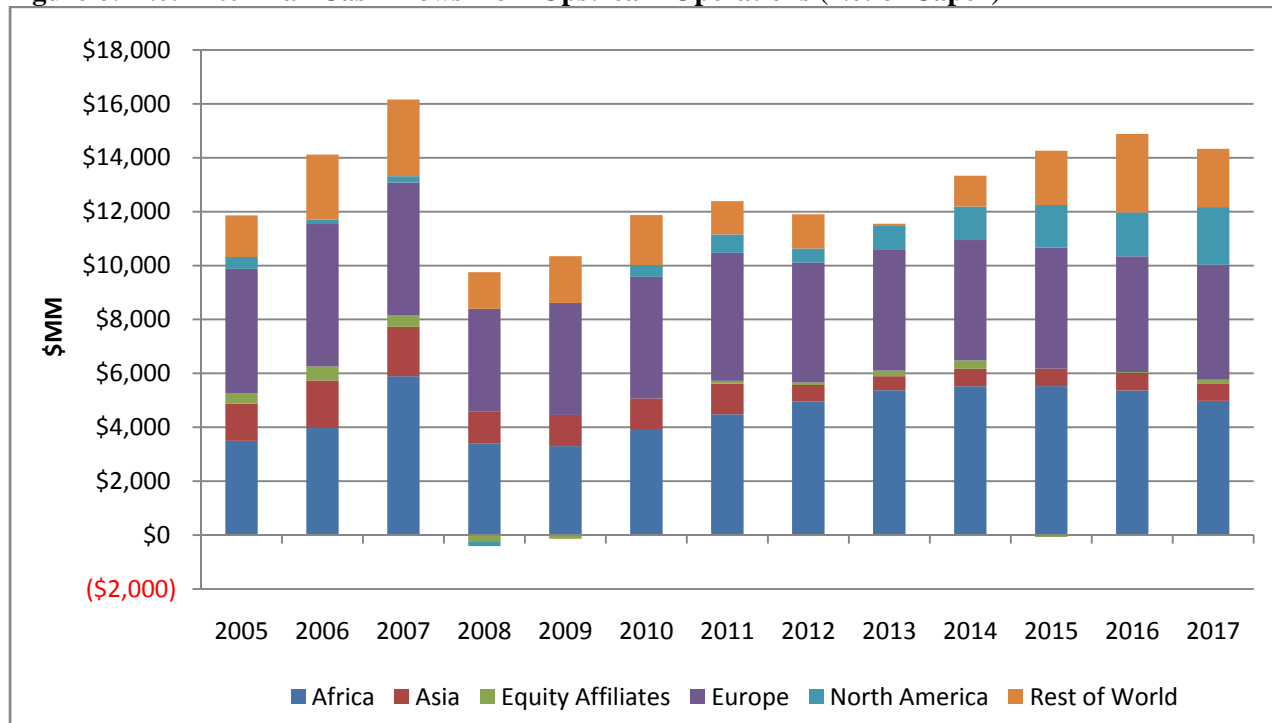
### Value Generation

Projected net after tax cash flows from upstream operations are shown in Figure 6. Like its peers, cash inflows from Total’s upstream operations more than cover capital and exploratory costs. Net cash flow is down sharply in 2008 due to higher capital spending in Africa and Rest of World.

Except for a pause in 2012 and 2013, net cash flows rise throughout the forecast period.

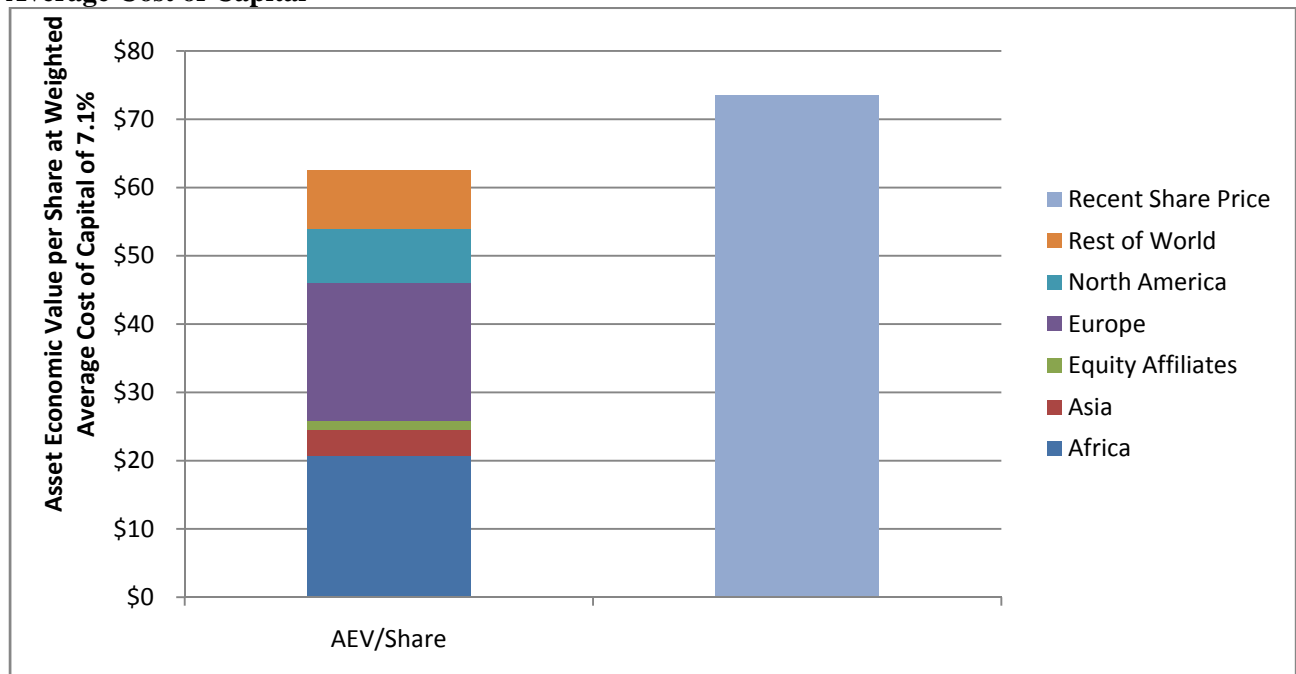
Figure 7 shows estimated regional contributions to Total’s share value. These are calculated based on the company’s estimated weighted average cost of capital (7.1%). Africa and Europe dominate the upstream segment’s value.

**Figure 6: Net After-Tax Cash Flows from Upstream Operations (Net of Capex)**



Source: GES Corporate Models Database

**Figure 7: Estimated Upstream Contribution to Share Valuation at the Company's Weighted Average Cost of Capital**



Source: GES Corporate Models Database

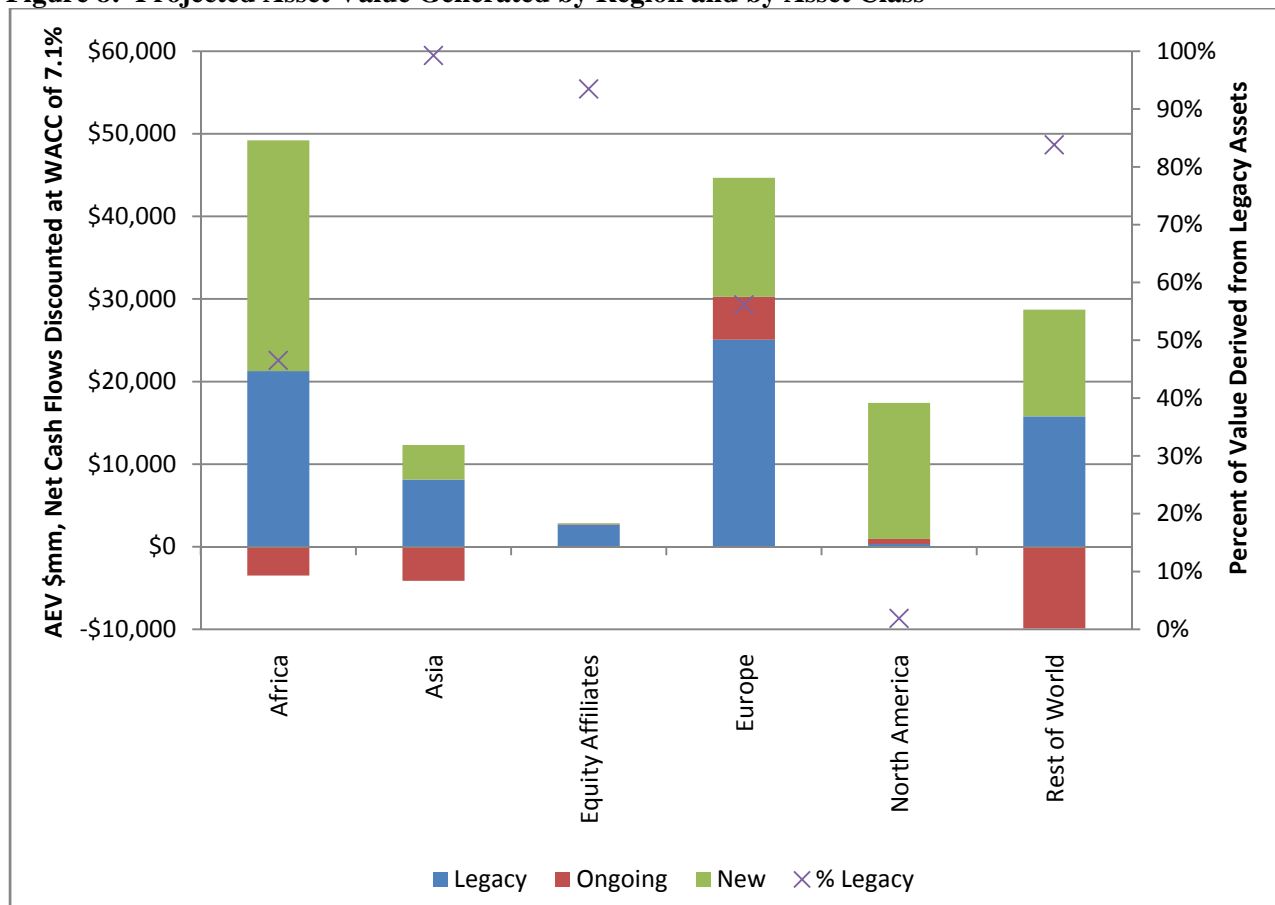
Based on the projected after tax cash flows net of capital spending, Total's upstream segment is estimated to add \$61.50 per share in our price case. This compares to a closing share price of \$73.55 on 5 August 2008.

GES model calculations assume that Total is an ongoing concern. That is, we assume that the company is not pursuing an MLP-like exploit and deplete strategy. Instead, we assume Total will continue to invest in new business development opportunities in an effort to generate long-term production beyond what is possible from its legacy producing assets and its known oil and gas new projects. Key performance parameters such as the average cost incurred per boe added are based on recent historical results for each reporting area.

The ongoing component of investments and future production will typically yield negative asset economic value because cash flows in the early years of the forecast period are almost always negative and the benefits of future production are offset by the discount factor. In short, a strategy to deplete existing assets and exit yields greater value than the ongoing concern scenario. One exception to this general rule is in cases where oil and natural gas price expectations are rising at an average annual rate that significantly offsets the discount factor.

Figure 8 shows estimated AEV generated by region and by asset class (legacy, new project, and ongoing).

**Figure 8: Projected Asset Value Generated by Region and by Asset Class**



Source: GES Corporate Models Database

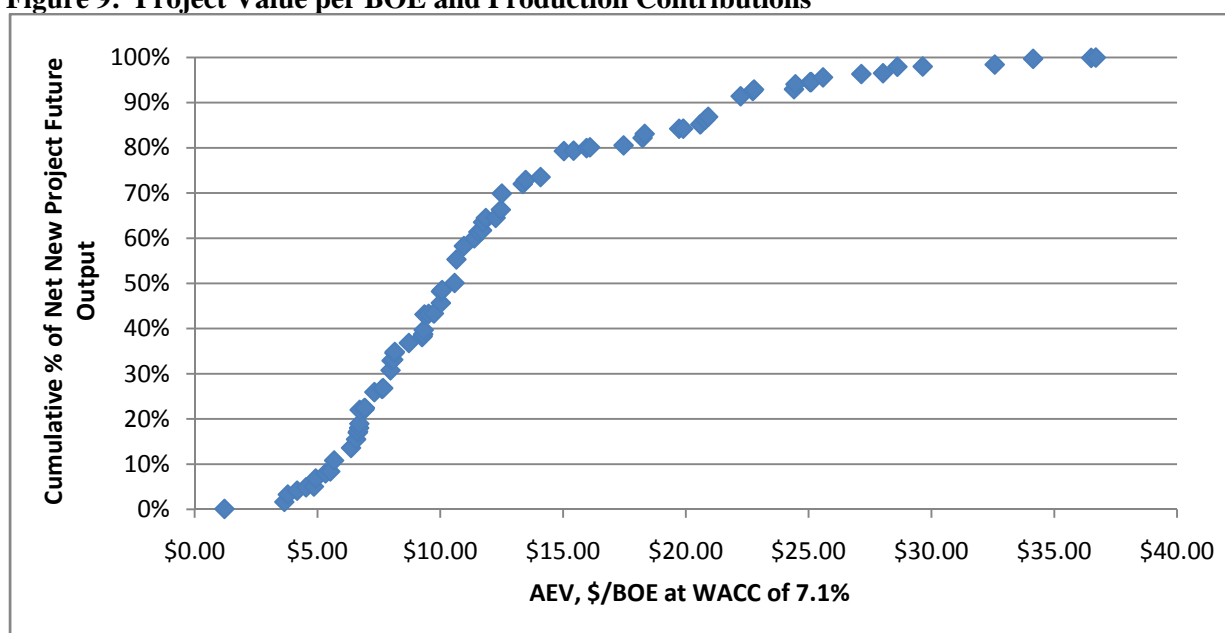
On a corporate basis, legacy asset net cash flows contribute 53% of the value of Total’s upstream operations. This is considerably less than is true for others in the peer group. The role of legacy assets varies substantially across regions. The extreme result in North America is due to the fact that current

production is negligible compared to future oil sands output and production from Tahiti in the deepwater Gulf of Mexico.

### Core and Marginal Projects

Project risk exposure is driven by multiple factors. One of these factors is the relative role of projects that are marginally value adding in the price scenario. Project per boe asset economic values (AEV) are plotted below against the cumulative percent of production. The more steeply this distribution curve climbs the more heavily weighted the portfolio is towards marginally viable projects. Fifty percent of new project reserves yield per boe value of \$10 or less. This is considerably stronger project performance than is true for other companies in the peer group such as Chevron. However, a significant part of the difference in valuations is due to differences in the weighted average cost of capital (7.1% for Total and 11.3% for Chevron).

**Figure 9: Project Value per BOE and Production Contributions**



Source: GES Projects Database and Project Economic Models

Figure 10 compares projects in Total's development portfolio on the basis of future net production and the discounted value of the project. The slope of a ray out of the origin equals the AEV contribution per boe. Three broad classes of assets emerge based on their per boe values: US\$7.50, US\$10.00 and US\$20.00 per boe.

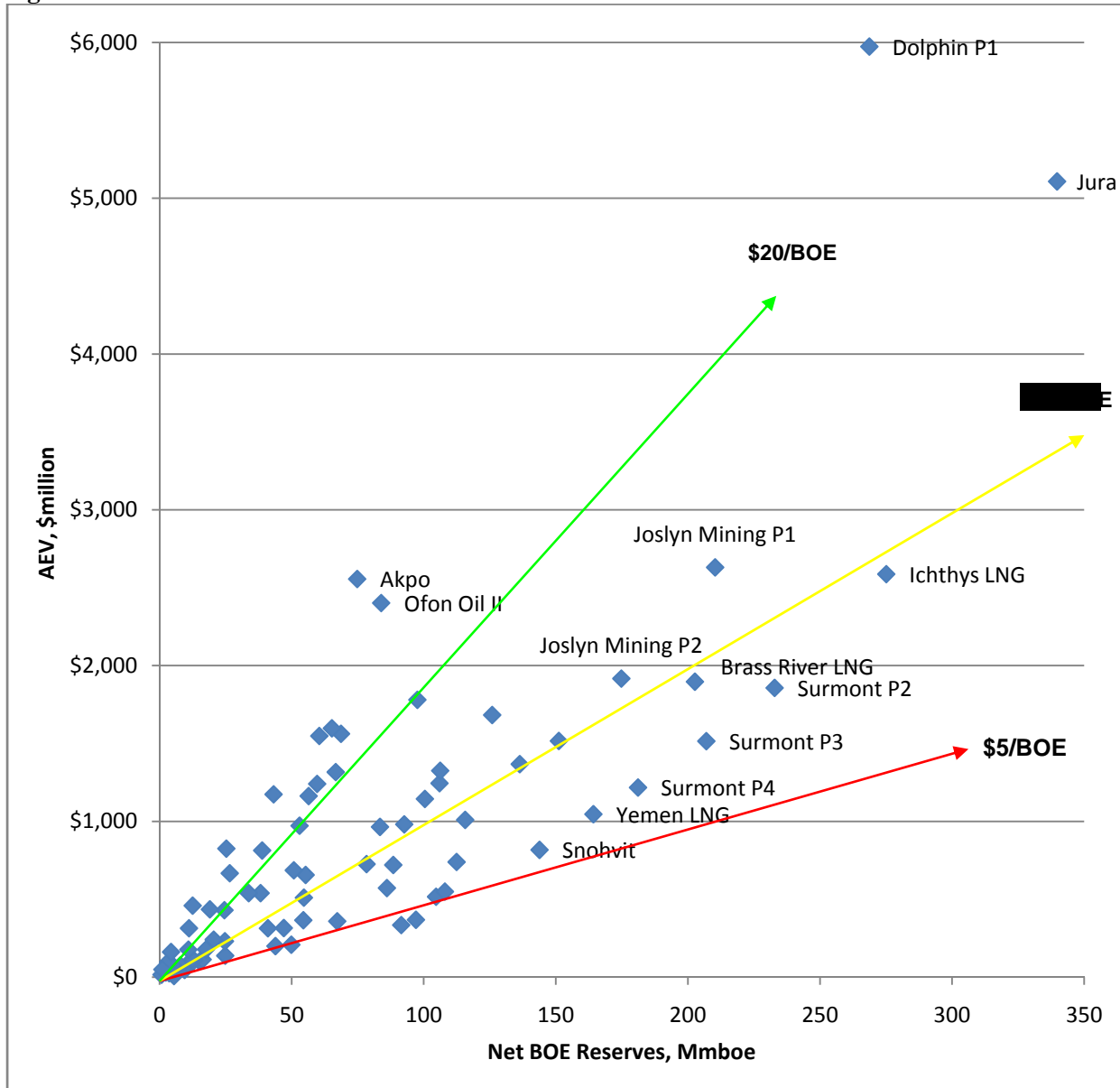
There are multiple reasons why projects will vary in terms of the per boe value they contribute including:

- Differences in timing of production startup,
- Costs of development vary by region, project, or technology type,
- Prices realized for output can vary substantially due to quality differences, regional market discounts, tariffs for integrated asset processing or
- Differences in the valuation of oil as opposed to natural gas

In a new project portfolio as diverse as Total's, all of these factors are at work at once. Two merit specific notice:

- A substantial portion of Total’s project portfolio involves a number of relatively high cost projects in ultra-deepwater and integrated asset programs such as LNG and oil sands
- Also, a substantial portion of the portfolio’s sources of future volume involve multiple phases and resultant long lead times

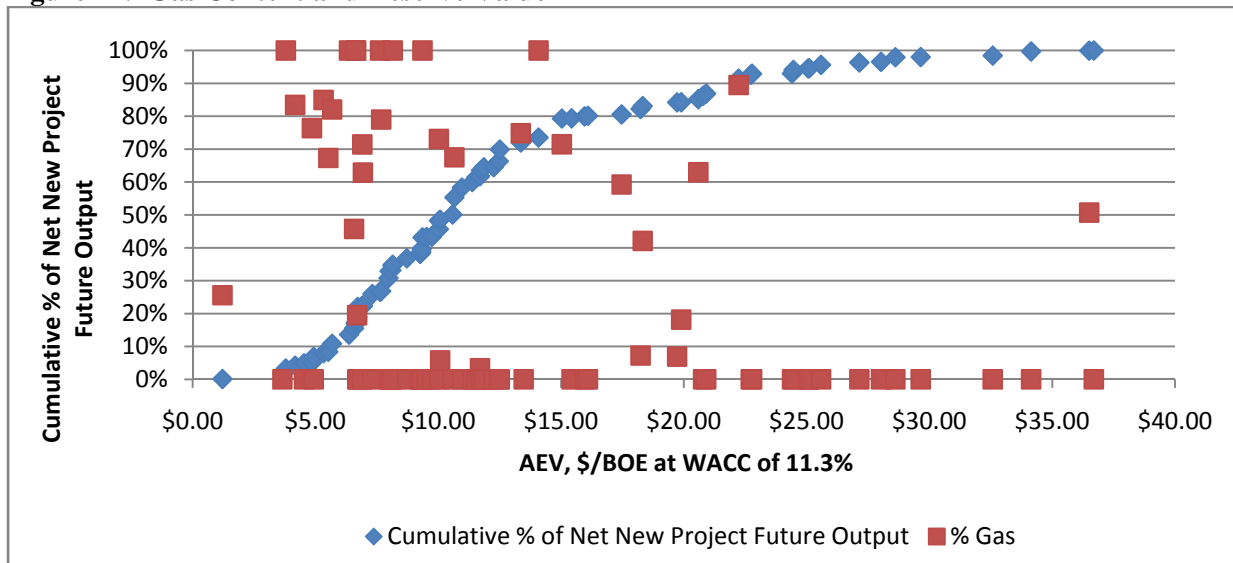
**Figure 10: Volume versus Value Contributions**



Source: GES Projects Database and Project Economic Models

The gas share of project reserves, on a BTU equivalent basis, is shown on the cumulative AEV distribution in the next graphic. High gas content (50% or more of BOE equivalent reserves) does not always translate into low per boe values. Other factors obviously drive reserve values. However, the negative impact of gas content on reserve values is generally true and the clustering of oil dominated projects in the upper half of the distribution can be seen.

**Figure 11: Gas Content and Reserve Value**

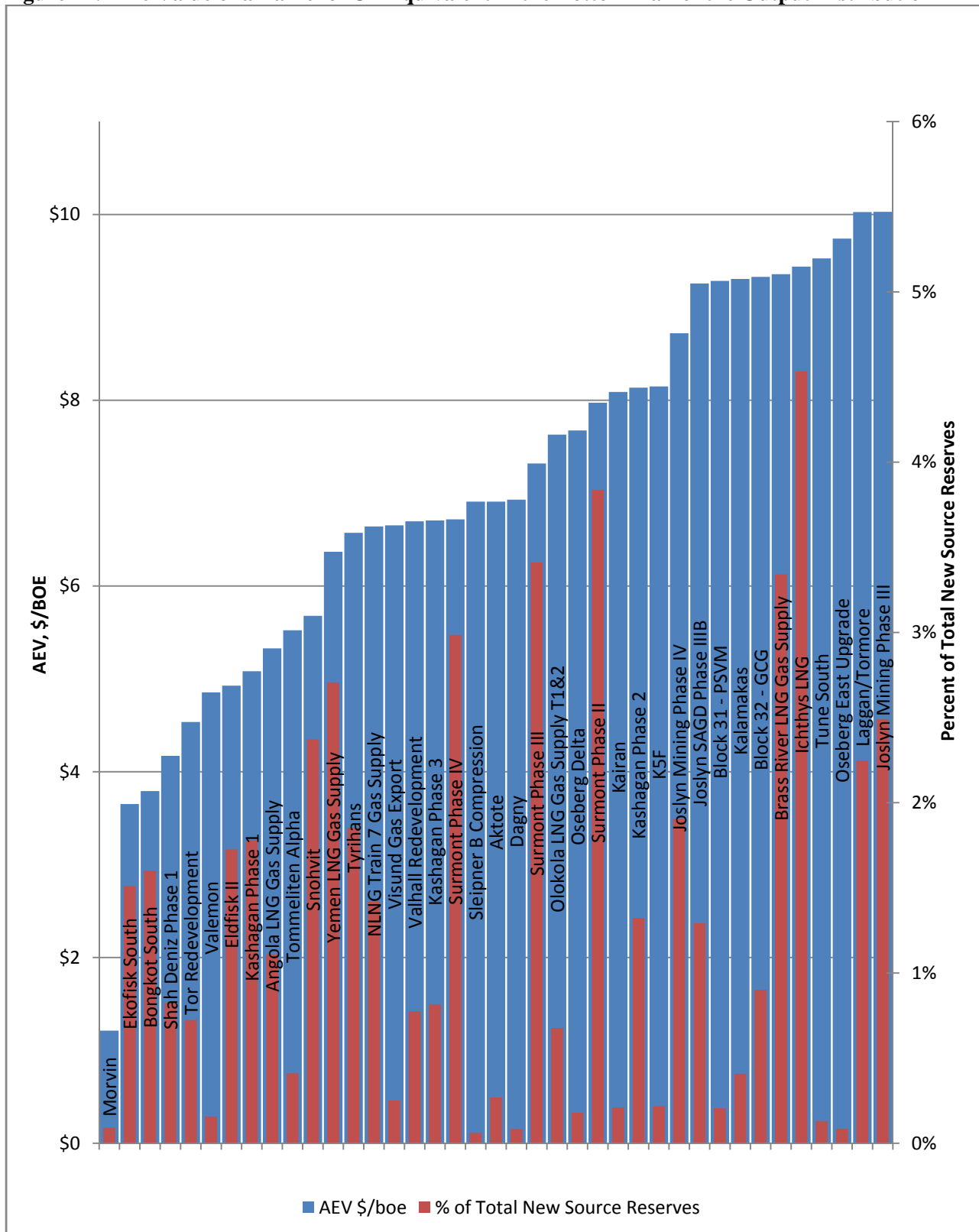


Source: GES Projects Database and Project Economics Models

Detailed data for each of the projects in the bottom 50<sup>th</sup> percentile of the output distribution is shown in Figure 12. The projects in the lower end of the value distribution are relatively more risky in terms of assured contribution to value in differing price, cost, and government take scenarios.

With only a few exceptions, this portion of the project portfolio is dominated by the long lead-time, multi-phase, complex and integrated developments. Specifically, projects in this group are dominated by LNG, oil sands, and Kashagan.

Figure 12: The Value of a Barrel of Oil Equivalent in the Bottom Half of the Output Distribution



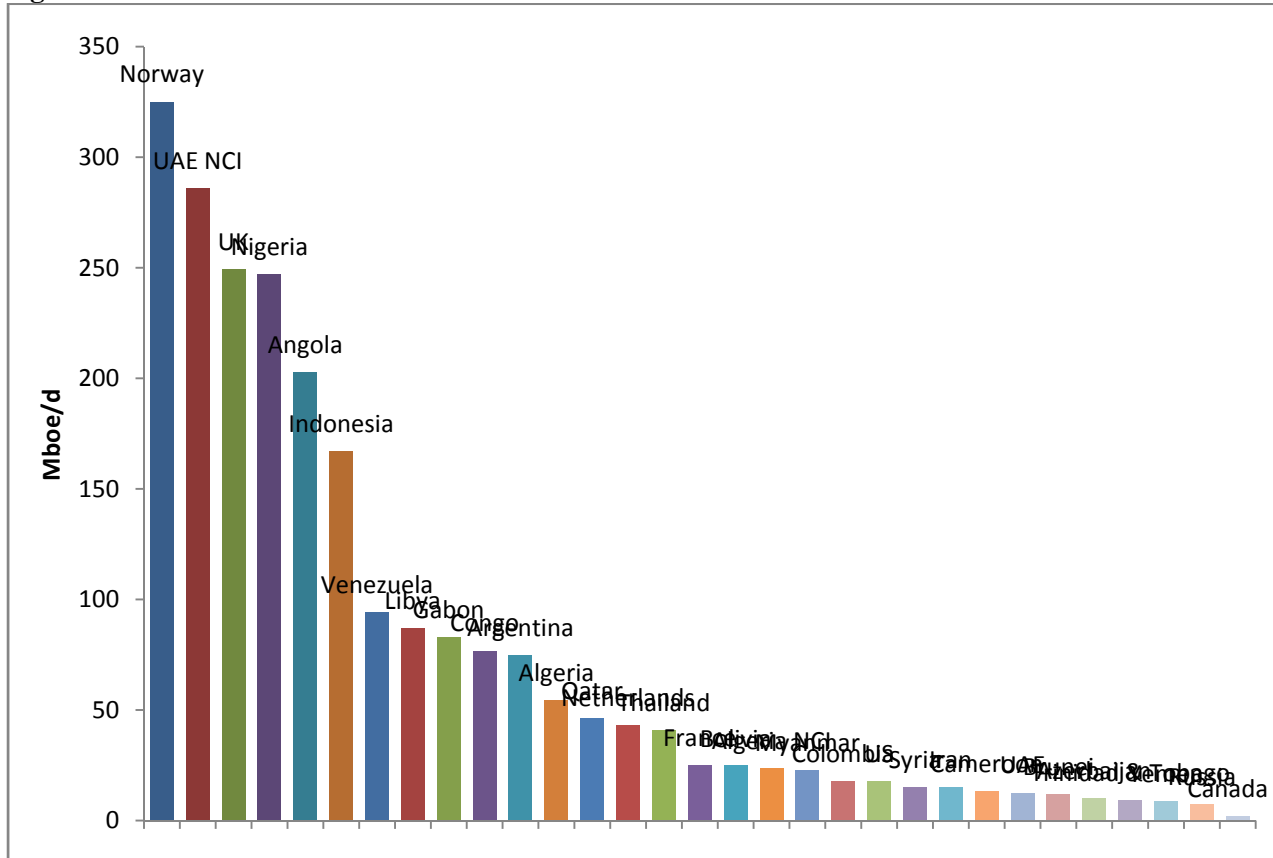
Source: GES Projects Database and Project Economic Models

## The Asset Portfolio

### Global Sources of Oil and Gas Production

Figure 13 shows the sources of boe production in 2007 by country. Production is spread relatively equally across the five leading countries. The Elf acquisition played a major role in establishing this level of diversity of supply, adding Nigeria and greatly increasing the Angolan presence. In addition, Total produces relatively modest amounts in a very large number of countries.

**Figure 13: Global Sources of BOE Production in 2007**



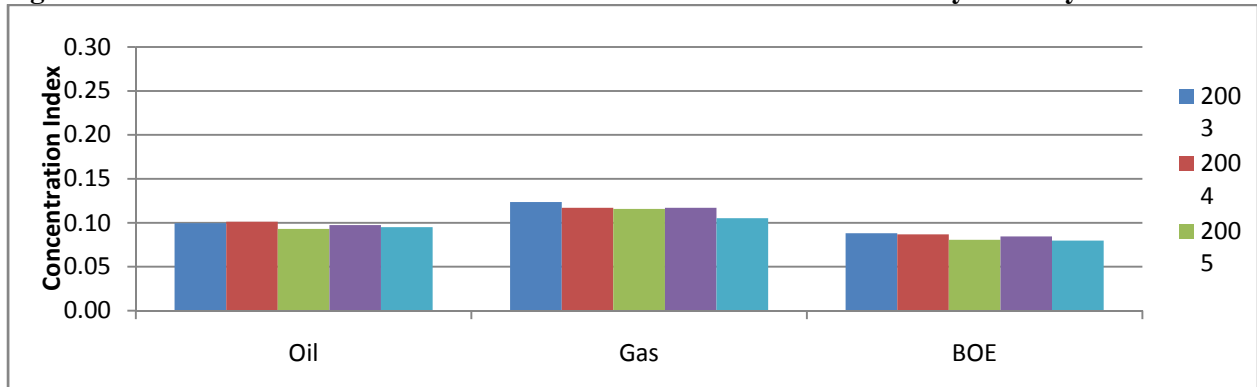
Source: GES Company Production Source Database; Company Statistical Supplements

A geographically diverse production base with multiple core producing areas is a key characteristic of a global competitor. This diversity often stands in stark contrast to other large but often asset or country-dependent companies such as many of the national oil companies or some of the very large but regionally focused oil and gas producers.

A quantitative measure of asset concentration that yields comparable results for companies of all sizes is the Herfindahl index. This index is calculated as the sum of squared shares of company production by country. The index is shown below for Total’s oil, gas and boe output.

On a country basis, Total’s production base is much more diversified than Chevron, BP or ConocoPhillips. While production concentration has been trending downward throughout the period, the changes year over year are marginal.

**Figure 14: Trends in the Level of Concentration of Chevron’s Production by Country**



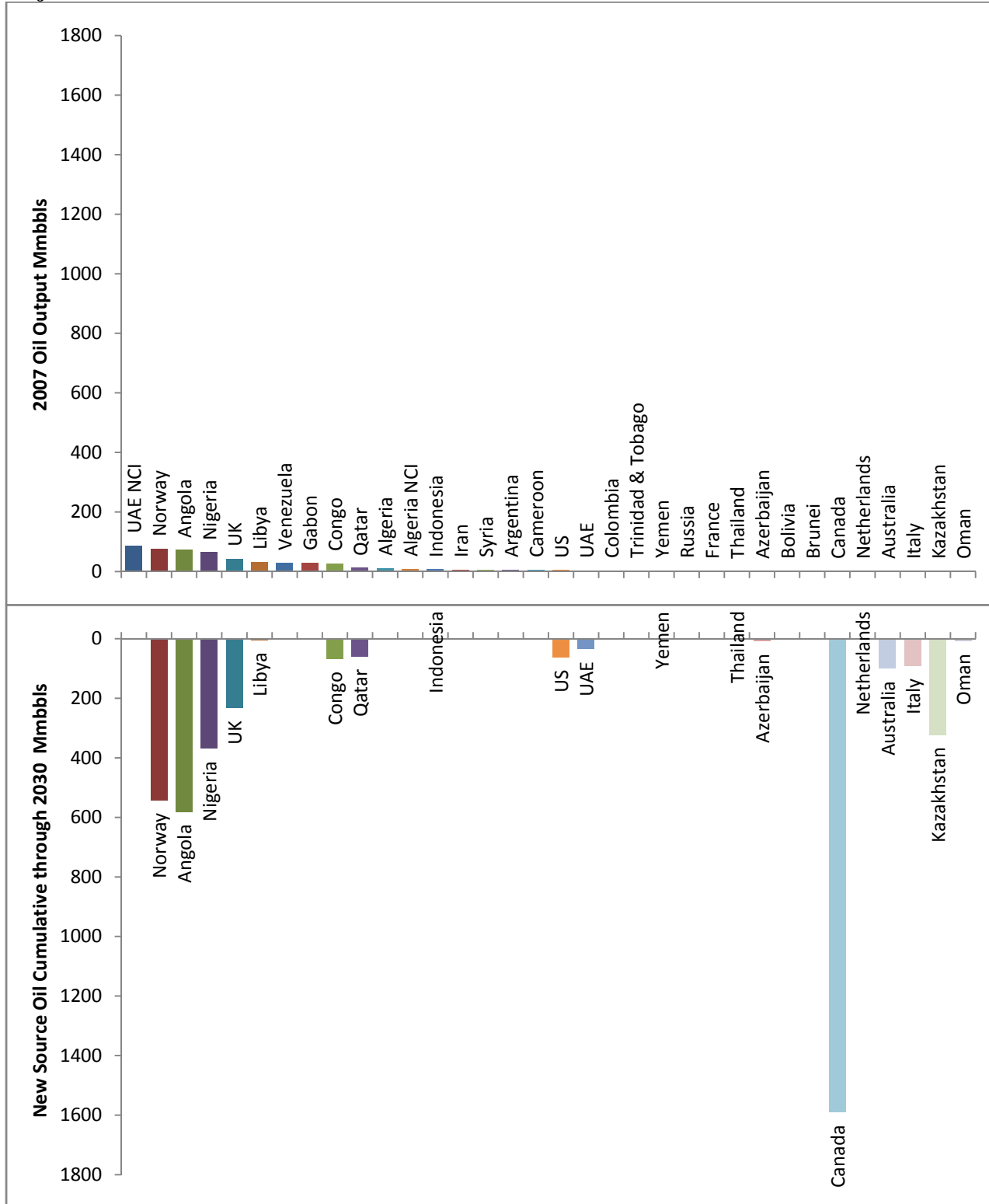
Source: GES Company Production Source Database; Company Statistical Supplements

Total’s project portfolio points toward continuing diversification as oil sands production rises in Canada and Australia becomes part of the production base with startup of Ichthys.

Figures 15 and 16 show country sources of 2007 oil and gas output, respectively, in the top chart and estimated net reserves from new projects in each country in the bottom chart. The data in both charts are in the same units (mmboc). The top graph in each figure shows which countries are important to current output. The bottom graph shows direction of change, i.e., which countries are important in terms of future new project output.

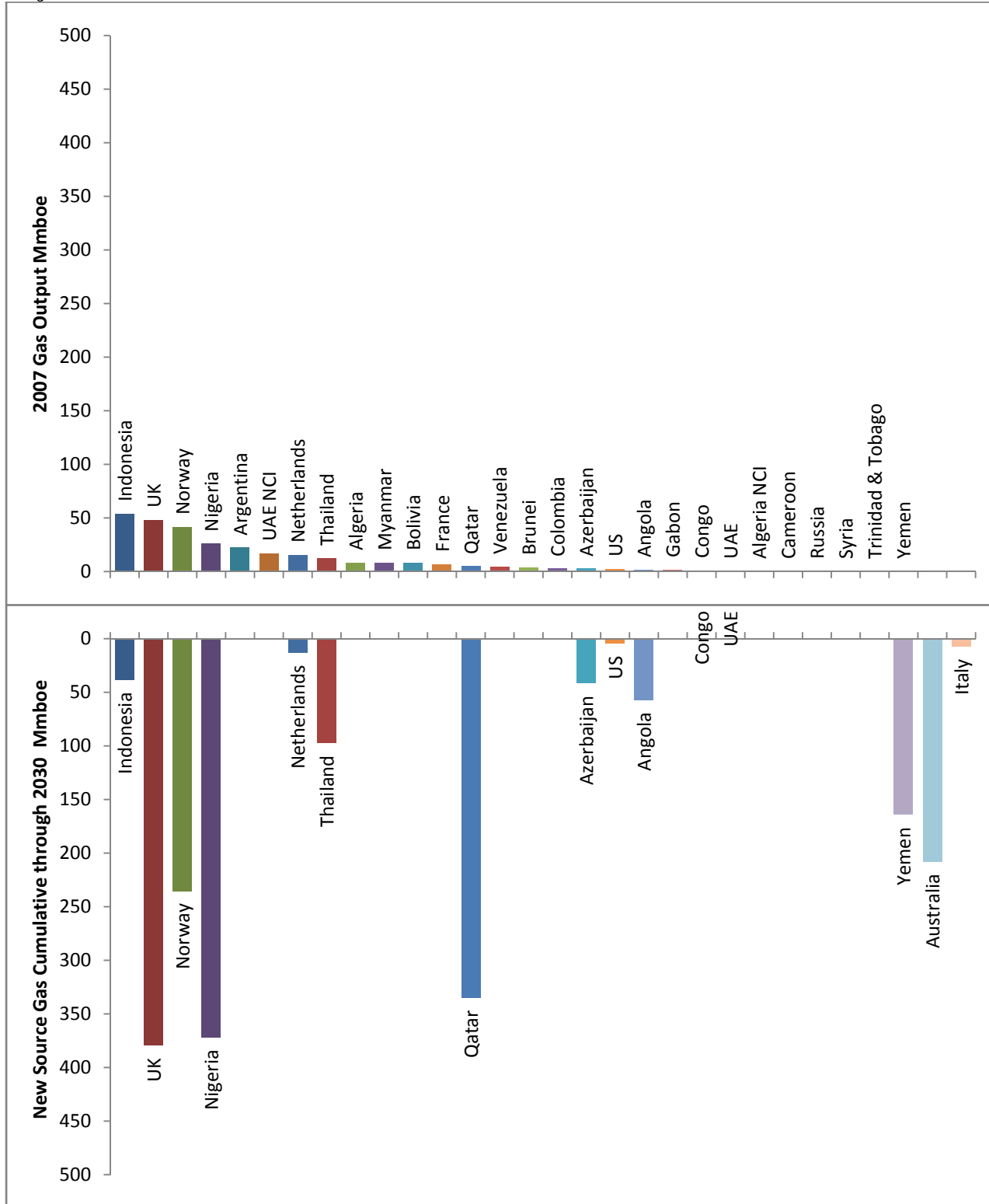
The size of reserve additions associated with new projects relative to current production rates is important as an indicator of production replacement rates in each country and highlights which countries are most heavily contributing to Total’s goal of increasing reserves in the near to medium-term. Canada stands out in the oil segment. Gas is more diverse with substantial contributions coming from six countries.

**Figure 15: Global Sources of Oil Output in 2007 & Projected Cumulative Net Output from New Projects**



Source: GES Company Production Source Database and Projects Database

**Figure 16: Global Sources of Gas Output in 2007 and Projected Cumulative Net Output from New Projects**

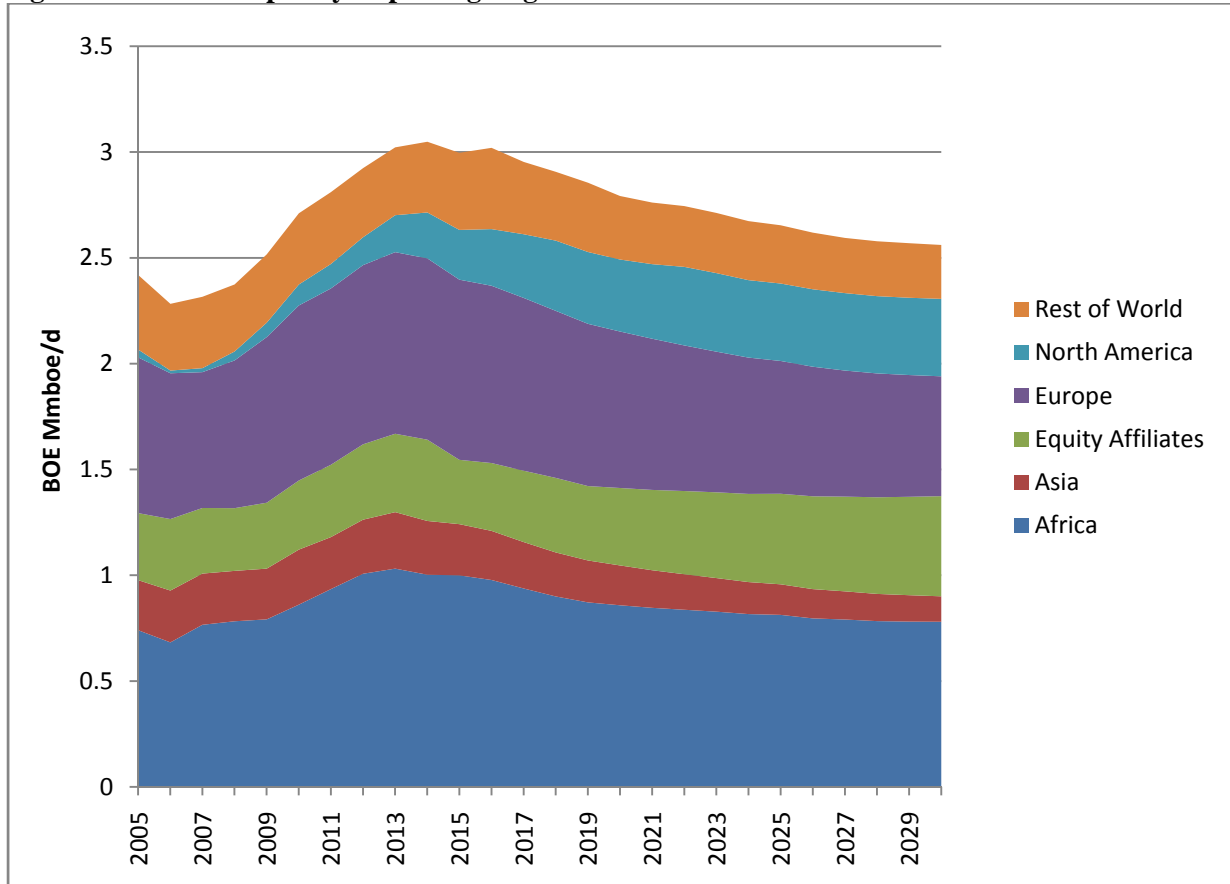


Source: GES Company Production Source Database and Projects Database

### Regional Production Forecasts

Strong growth in output from Africa with additional contribution from North America drives BOE output throughout the first five-year forecast period. Longer-term, North America adds both substantial volumes and stability.

**Figure 17: BOE Output by Reporting Regions**

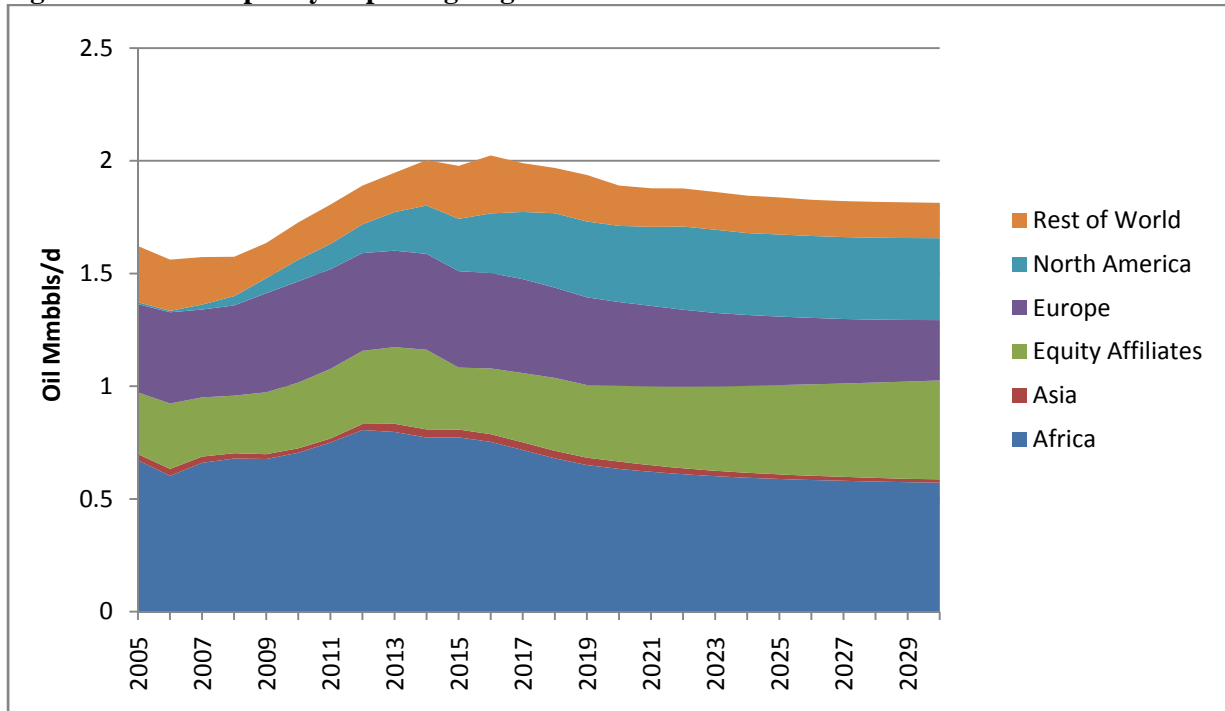


Source: GES Corporate Models Database

Both oil and gas output is projected to rise through 2013. Total’s oil production profile is noticeably more stable than one might expect due, primarily, to oil sands.

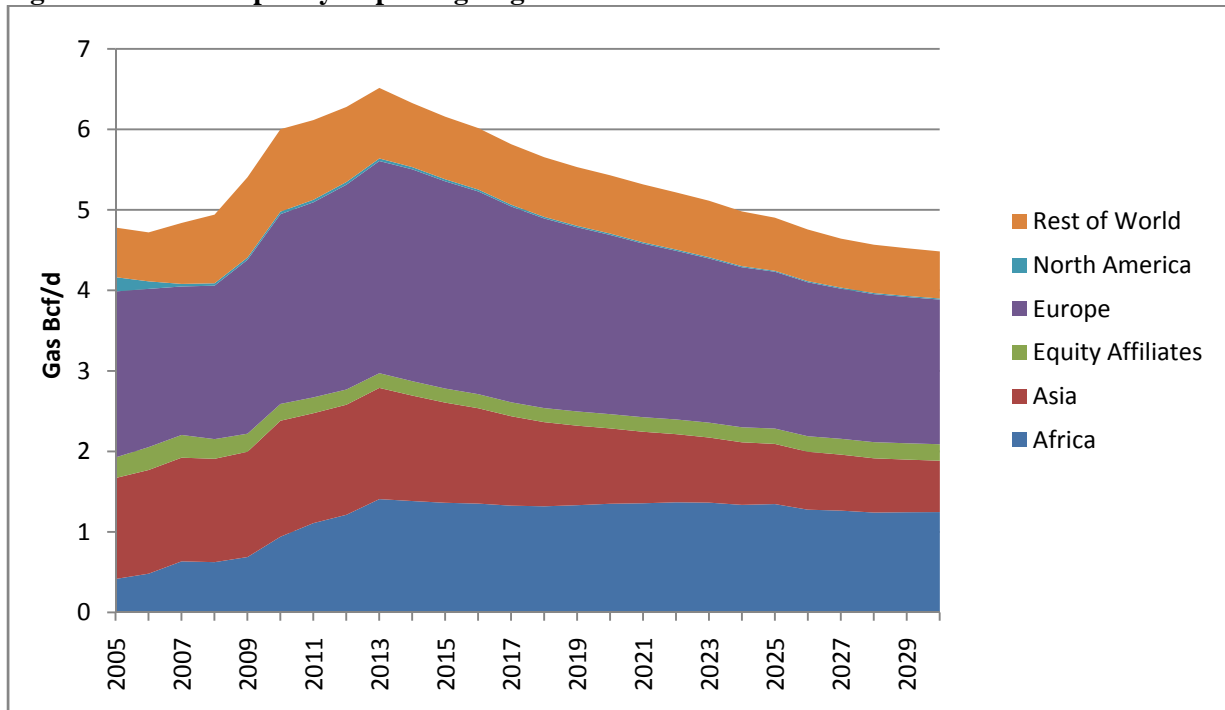
The growth in African natural gas production and its relatively stable profile over an extended period of time is also a key driver in the Total portfolio.

**Figure 18: Oil Output by Reporting Regions**



Source: GES Corporate Models Database

**Figure 19: Gas Output by Reporting Regions**



Source: GES Corporate Models Database

## Composition of the Production Base

In 2007, oil accounted for 65% of Total's worldwide boe output. A breakdown by country is provided in Table 1. Of the five leading producing countries, only the UK is primarily gas on a btu equivalent basis.

**Table 1: Relative Roles of Oil and Gas in 2007 Global Production, Mboe/d**

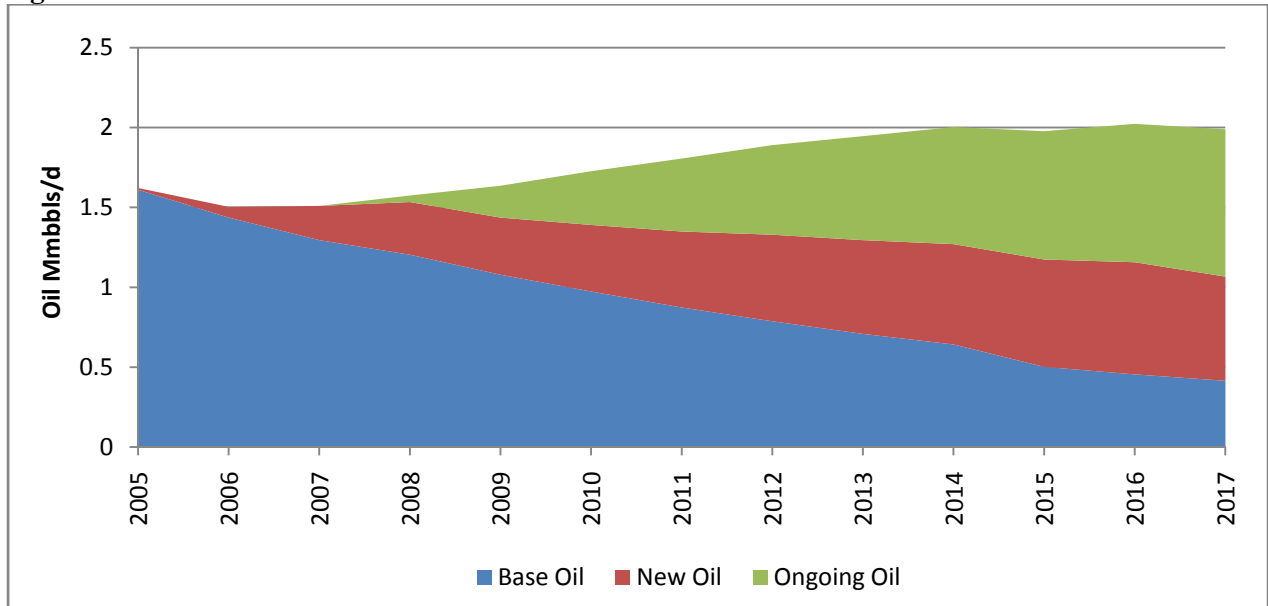
Country	Oil Mb/d	Oil Share	BOE Gas Output Mboe/d	BOE Output Mboe/d
Norway	211.00	64.9%	114.17	325.17
UAE NCI	240.00	83.9%	46.17	286.17
UK	117.00	46.9%	132.33	249.33
Nigeria	176.00	71.3%	71.00	247.00
Angola	198.00	97.6%	4.83	202.83
Indonesia	20.00	12.0%	147.00	167.00
Venezuela	82.00	86.9%	12.33	94.33
Libya	87.00	100.0%	0.00	87.00
Gabon	78.00	94.2%	4.83	82.83
Congo	74.00	96.3%	2.83	76.83
Argentina	14.00	18.7%	60.83	74.83
Algeria	32.00	58.5%	22.67	54.67
Qatar	33.00	71.5%	13.17	46.17
Netherlands	1.00	2.3%	42.00	43.00
Thailand	6.00	14.7%	34.83	40.83
France	6.00	23.8%	19.17	25.17
Bolivia	3.00	12.1%	21.83	24.83
Algeria NCI	23.00	97.2%	0.67	23.67
Myanmar	0.00	0.0%	22.67	22.67
Colombia	10.00	56.6%	7.67	17.67
US	12.00	67.9%	5.67	17.67
Syria	15.00	97.8%	0.33	15.33
Iran	15.00	100.0%	0.00	15.00
Cameroon	13.00	97.5%	0.33	13.33
UAE	11.00	86.8%	1.67	12.67
Brunei	2.00	16.7%	10.00	12.00
Azerbaijan	3.00	29.0%	7.33	10.33
Trinidad & Tobago	9.00	96.4%	0.33	9.33
Yemen	9.00	100.0%	0.00	9.00
Russia	7.00	95.5%	0.33	7.33
Canada	2.00	100.0%	0.00	2.00

Source: GES Company Production Source Database; Company Statistical Supplements

As shown earlier in Figure 3, in each of the next five year forecast periods, oil's share of worldwide output is projected to remain substantially unchanged.

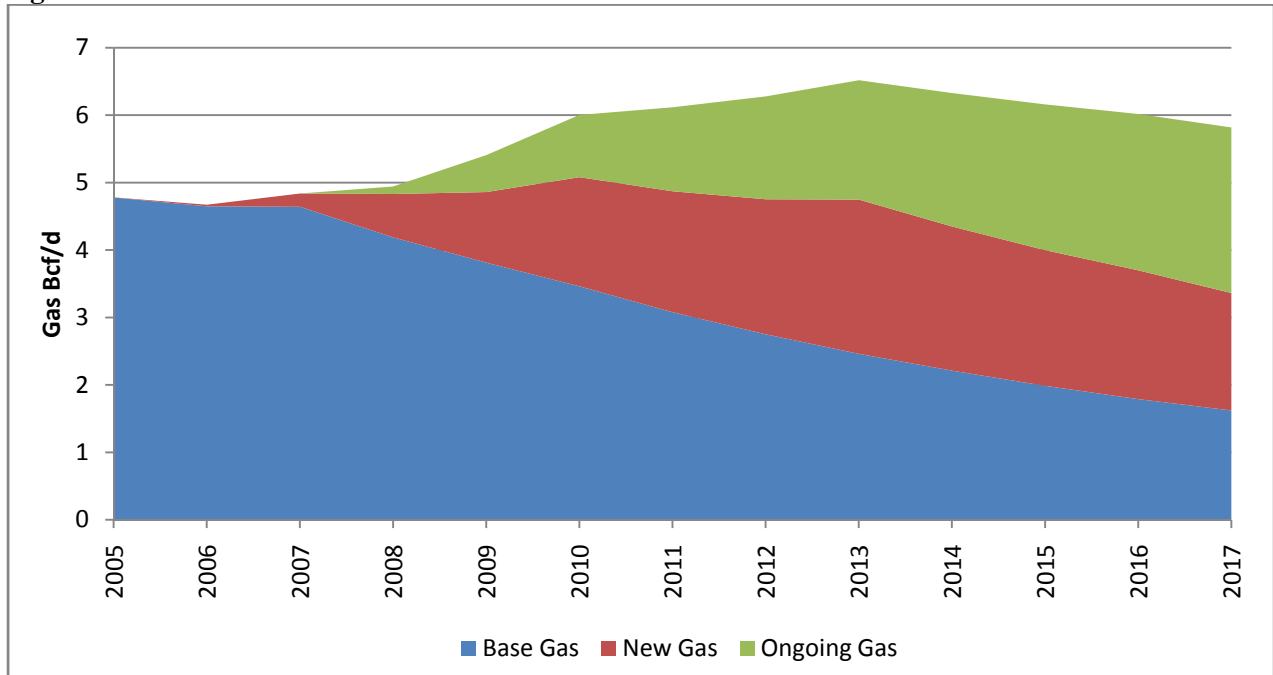
**Legacy, New Project and Ongoing Operations Sources of Production**

**Figure 20: Oil Production Forecast**



Source: GES Corporate Models Database

**Figure 21: Gas Production Forecast**

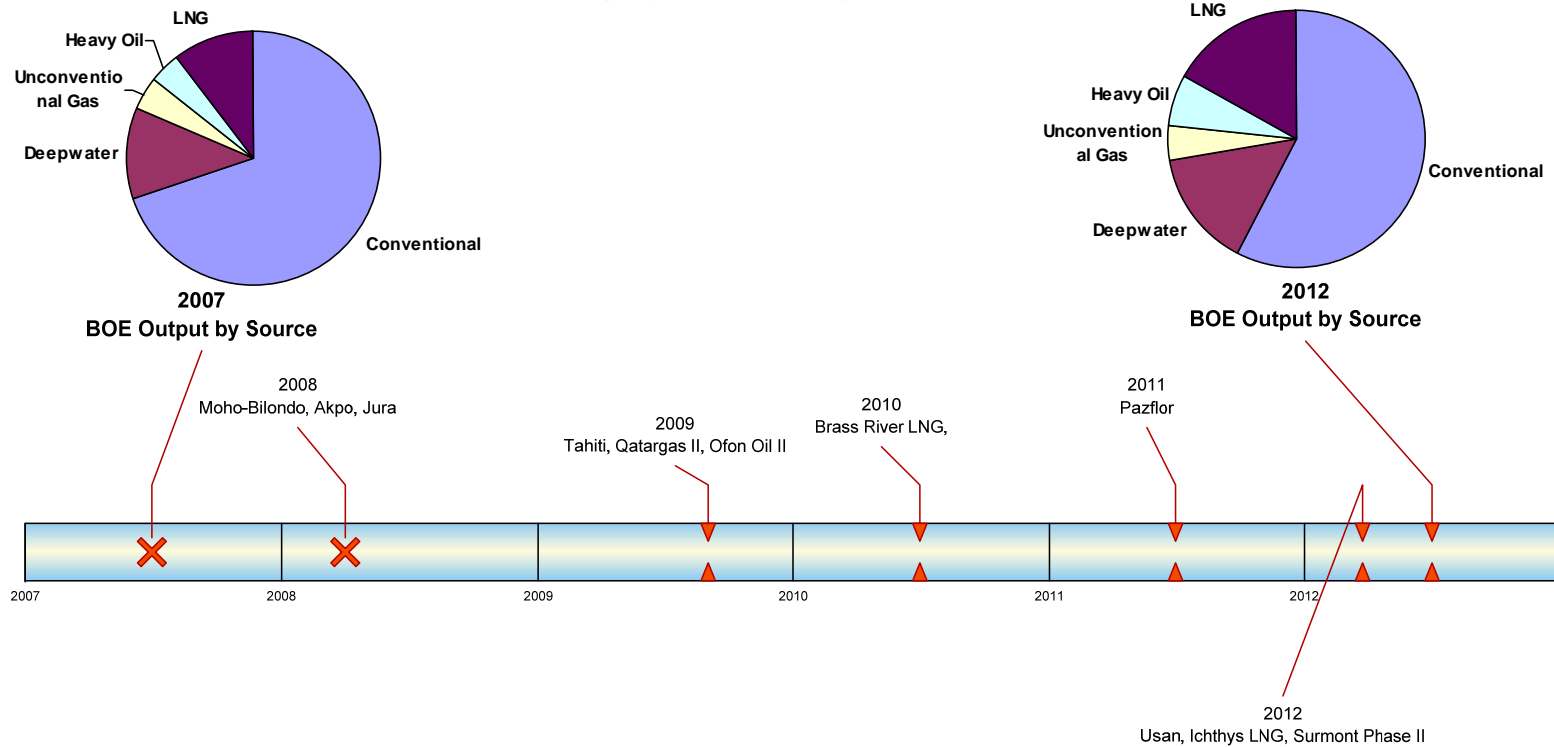


Source: GES Corporate Models Database

The rate of base output decline on an average annual basis is projected to be 9.5% and 10.8% for oil in the 2007-12 and 2007-2017 periods respectively. Decline rates for gas are projected to be 10% in each period.

**Five Year Evolution of Production Sources by Asset Type**

Total BOE Output by Asset Type  
Legacy and New Project Assets

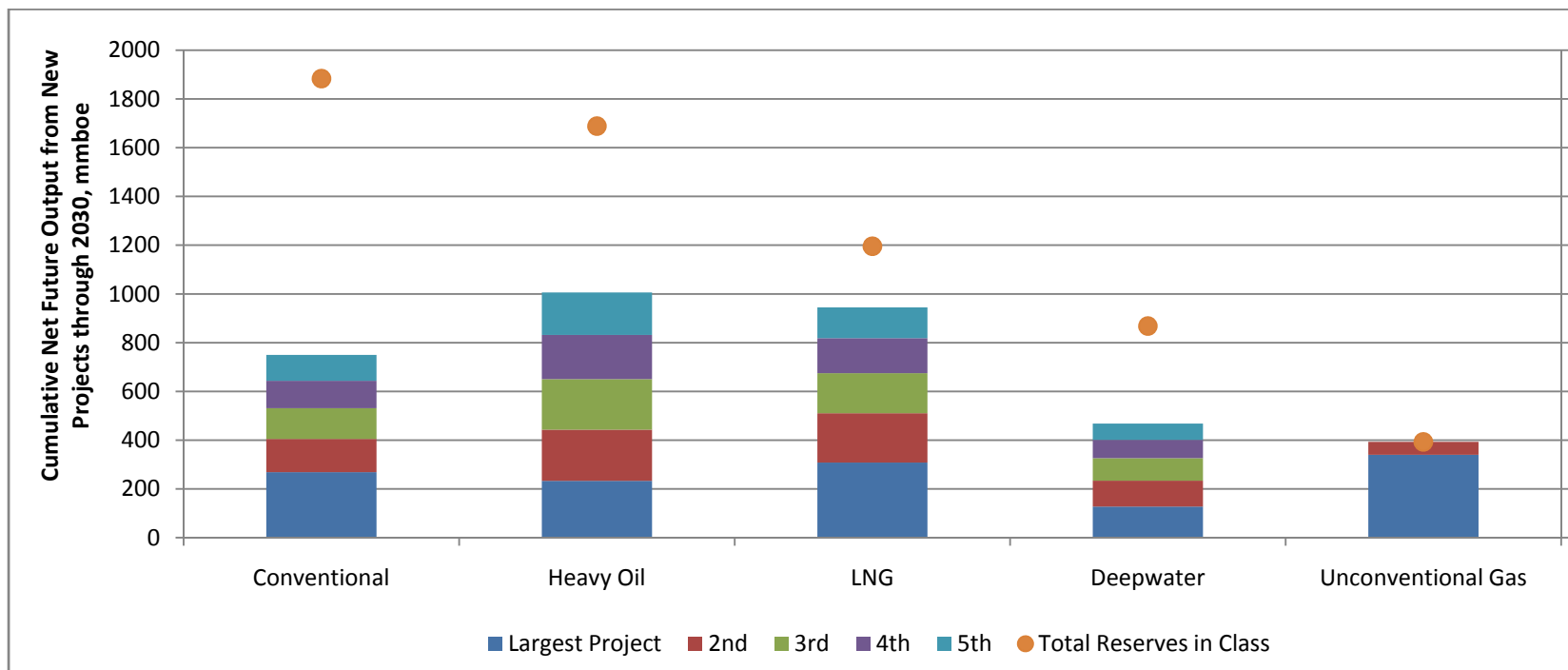


X – Actual, Milestone Achieved or Event Occurred  
Triangle – Milestone or Event Expected or Yet to Occur

Source: GES Corporate Models Database

Over the next decade Total’s production mix shifts decisively away from conventional sources: falling from 70% of the current production base to 59% in five years and only 49% of total output by 2017. The production base clearly is shifting towards integrated asset resources including heavy oil and LNG.

This shifting composition of Total’s production base reflects, in part, declining conventional legacy asset production. However, as shown in the chart below, the new project portfolio is heavily weighted towards heavy oil and LNG with deepwater a relatively small part of the portfolio going forward. The relatively stagnant share of deepwater could change if exploration efforts in Angola prove up new development grade projects beyond the near to medium-term.



Source: GES Projects Database and Project Economic Models

The data are sorted by total additions to future production by class. Hence, new conventional projects will add an expected 1.9 billion boe with 40% derived from the top five projects. Unconventional sources are more heavily concentrated in the top five projects in each class. The degree of concentration of heavy oil assets is considerably greater than the graphic first suggests. With the exception of Tempa Rossa (which contributes only 6% of heavy oil output from known projects) all heavy oil production is derived from multiple phases of development at Surmont and Joslyn in Canada.

## Outlook by Major Reporting Region

### Africa

Total's African production is focused in Angola and Nigeria. However, the company has significant production in a number of countries.

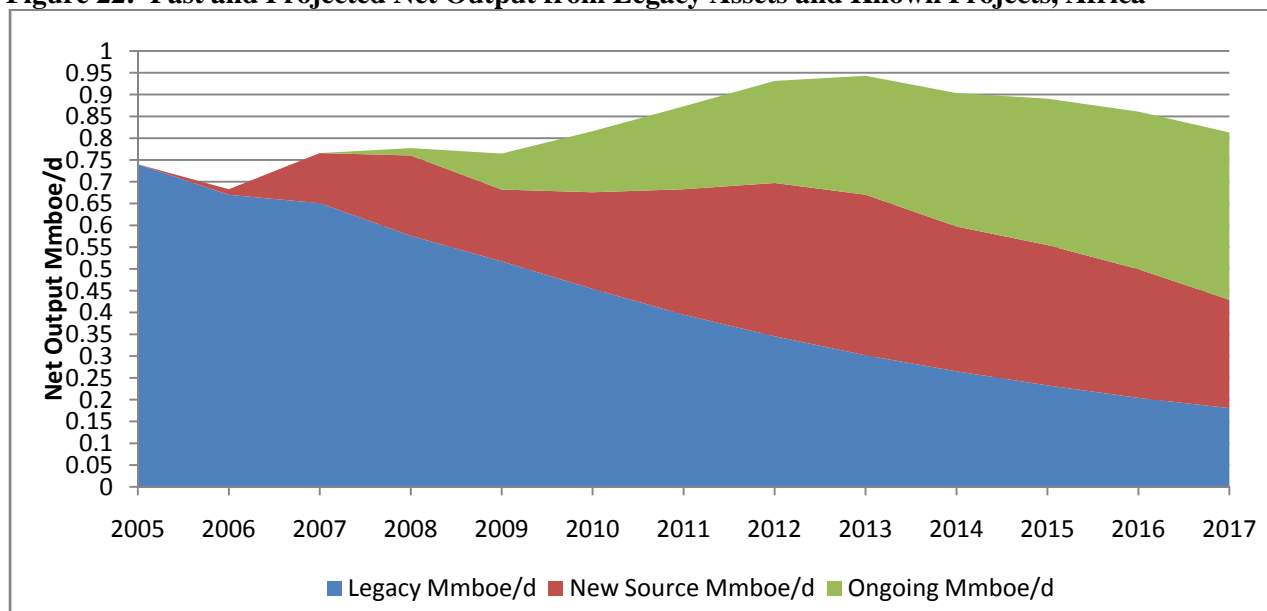
#### Average Daily BOE Output, Mboe/d

Country	2003	2004	2005	2006	2007
Algeria	80.3	68.7	61.5	56.5	54.7
Angola	156.0	163.5	147.8	112.0	202.8
Cameroon	14.0	13.0	12.3	13.3	13.3
Congo	91.0	90.5	94.3	96.3	76.8
Gabon	105.5	103.5	98.3	86.5	82.8
Libya	42.0	62.0	84.0	84.0	87.0
Nigeria	190.5	265.2	243.3	233.8	247.0
Total	679.3	766.3	741.7	682.5	764.5

Source: GES Company Production Source Database; Company Statistical Supplements

Deepwater operations have driven Angolan production and will be a key factor in Nigeria in the future as well. Like most companies, Total's African production has been almost exclusively oil although Nigerian LNG has risen in importance over time and natural gas production will play a much more significant role in the future due to LNG projects in Nigeria and Angola.

**Figure 22: Past and Projected Net Output from Legacy Assets and Known Projects, Africa**

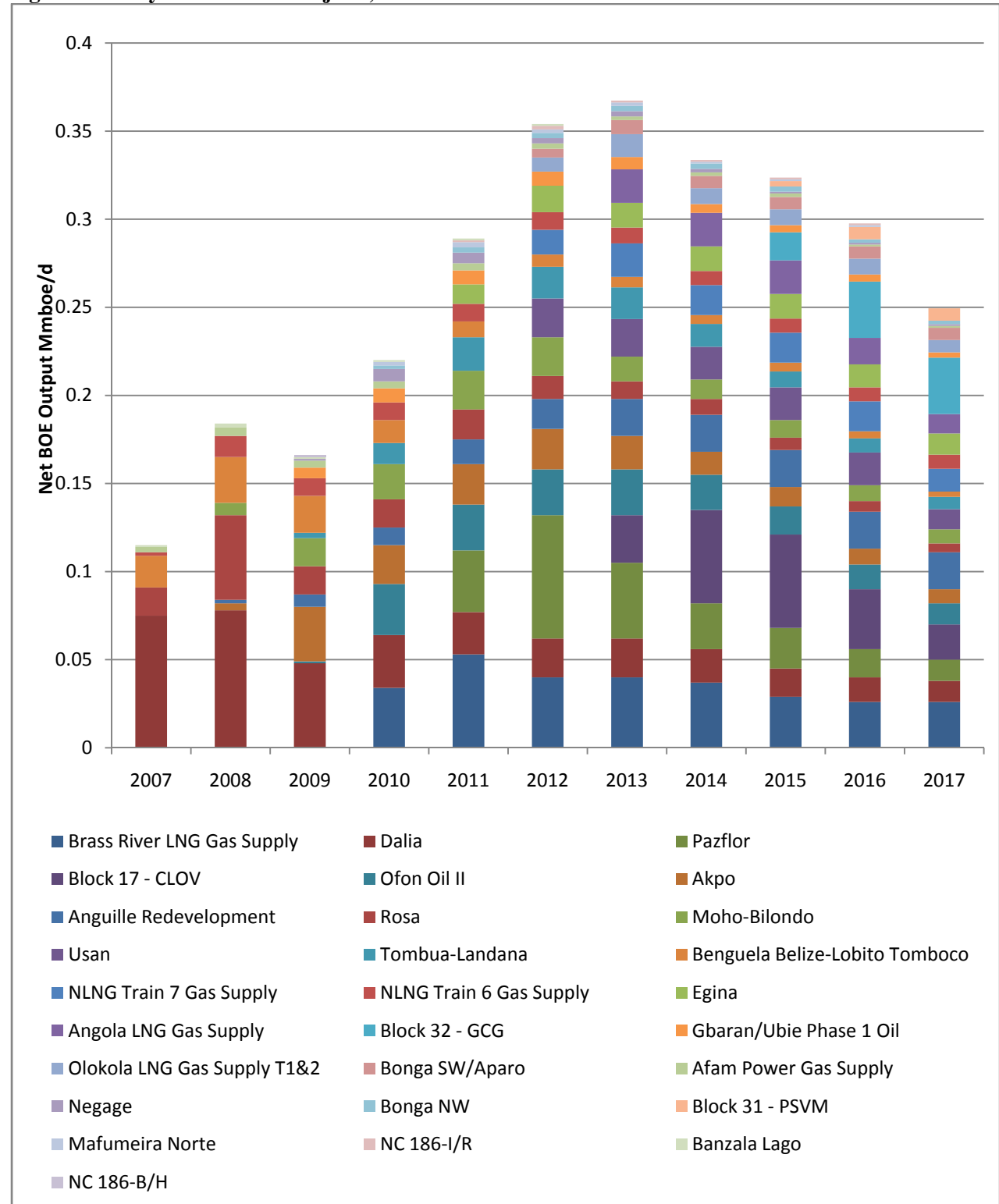


Source: GES Corporate Models Database

Base decline rates are expected to average 11.9% per year in the near-term (through 2012) and 12% over the period 2012 through 2017. Total's African production has tended to fluctuate over time and is likely to continue to do so.

The African segment of Total's operations continues to yield multiple developments.

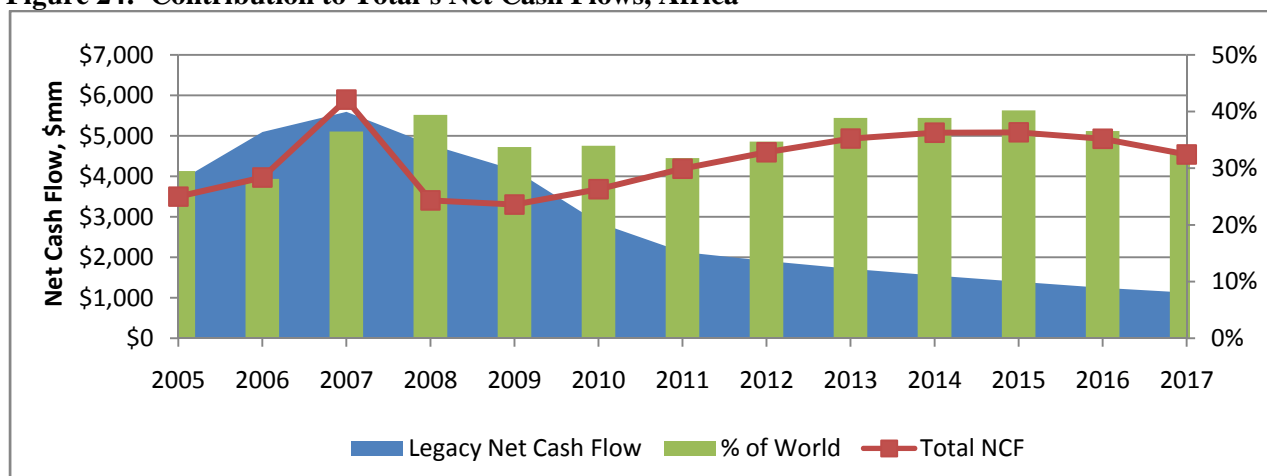
**Figure 23: Key Oil and Gas Projects, Africa**



Source: GES Projects Database and Project Economic Models

Africa's contribution to global net cash flows from upstream operations is expected to remain high throughout the forecast period, fluctuating between 30% and 40%.

**Figure 24: Contribution to Total's Net Cash Flows, Africa**



Source: GES Corporate Models Database

## Milestones and Change Catalysts to Watch

### Angola

Milestones achieved to date include:

- Entered Blocks 15/06 and 17/06. Announced Sangos-1 discovery in Block 15/06 5 May 2008.
- Dalia online December 2006 and Rosa online 18 June 2007
- Pazflor FID 27 December 2007; Ofon II FID 19 July 2007

Angola LNG: This gas export project is an important element of Total's global natural gas strategy and, once online, will provide relatively small but stable production.

Milestones achieved to date include:

- Environmental approval in early 2007
- FID in December 2007

### Nigeria

The very large role of Nigerian production in Total's current and future production base obviously implies a sensitivity of results to the ongoing operational uncertainties in the country. The recent attack on the Bonga deepwater offshore facility suggests that the company's future risk exposure may be even greater than thought before. As Total transitions to an increasing natural gas role in Nigeria its onshore operations become more integrated with the consequent investments in onshore large scale plants.

The company is involved in Nigerian LNG, Olokola LNG and Brass River LNG.

Milestones Achieved to Date:

- NNPC, Chevron, BG and Shell sign Olokola MOU in 2005

- Chevron issued a FEED contract to Foster Wheeler for non-associated gas wellhead platforms and the pipelines portion of Chevron's Olokola Gas Supply Project in 2006. Per the announcement, the new facilities will be approximately 10 to 40 kilometers offshore and will include one 15,000 ton topsides production platform, one 14,000 ton topsides production platform, two living quarters platforms, each to accommodate approximately 60 people, nine wellhead platforms, flares, bridges and approximately 400 miles of sub-sea pipelines for gathering and delivering the gas to shore. FEED to be complete by EOY 2006.

### **Republic of the Congo**

#### Milestones Achieved to Date

- Moho-Bilondo in the Republic of the Congo entered production 28 April 2008.
- Total has announced 5 deepwater discoveries in the Mer Tres Profunde Sud block in the Republic of the Congo. It is unclear if development of these discoveries will proceed.

### **Libya**

Total and its partners reached agreement to extend Block NC115 by fifteen years and Block NC186 by ten years. The agreement also cut the JV partners' primary share of production from these blocks. This agreement makes development of NC186-I/R feasible.

### **Gabon**

The Grand Anguille Marine license was renewed in July 2007. The new license term extends 25 years. Following up, Total has begun its Anguille Redevelopment project.

## Asia

## Average Daily BOE Output, Mboe/d

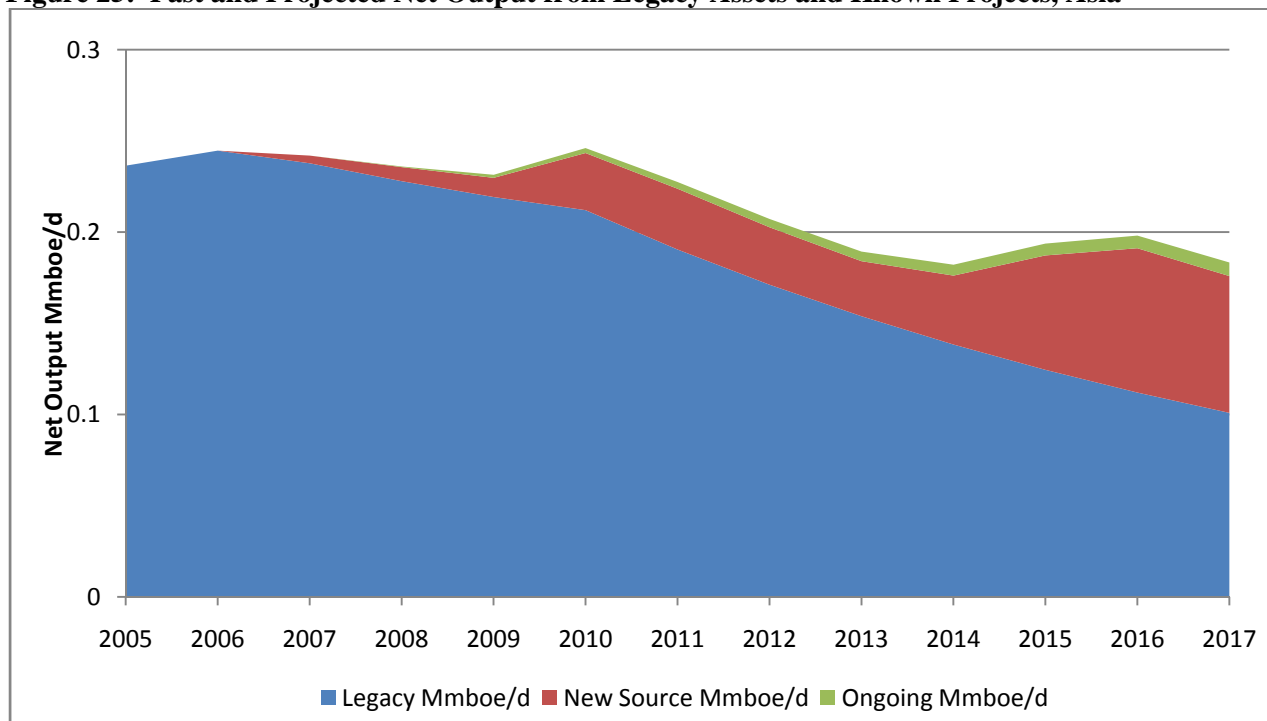
Country	2003	2004	2005	2006	2007
Azerbaijan	0.0	0.0	0.0	0.0	10.3
Brunei	12.2	12.7	12.0	13.8	12.0
Indonesia	149.8	164.3	168.3	168.5	167.0
Myanmar	22.0	18.3	18.2	20.2	22.7
Thailand	33.7	39.7	39.5	40.2	40.8
<b>Total</b>	<b>217.7</b>	<b>235.0</b>	<b>238.0</b>	<b>242.7</b>	<b>252.8</b>

Source: GES Company Production Source Database; Company Statistical Supplements

Total's legacy production in Asia is dominated by Indonesia and, in particular, by natural gas supplied to the Bontang LNG plant on Kalimantan from the Total/Inpex Mahakam Block. In 2007 production began in Azerbaijan with the startup of the Shah Deniz gas project.

**Total's Asian portfolio is mature with relatively little sustained growth potential evident in existing producing countries.** Exceptions could include Australia's Ichthys LNG project and additional phases at Shah Deniz (although the company's working interest is too small for a second phase to have large effects). **The aging of Total's position in Asia is probably one of the biggest single driving forces behind the company's sharply expanded new business development efforts in Australia as well as its entry into Vietnam and license acquisitions in Malaysia.**

**Figure 25: Past and Projected Net Output from Legacy Assets and Known Projects, Asia**

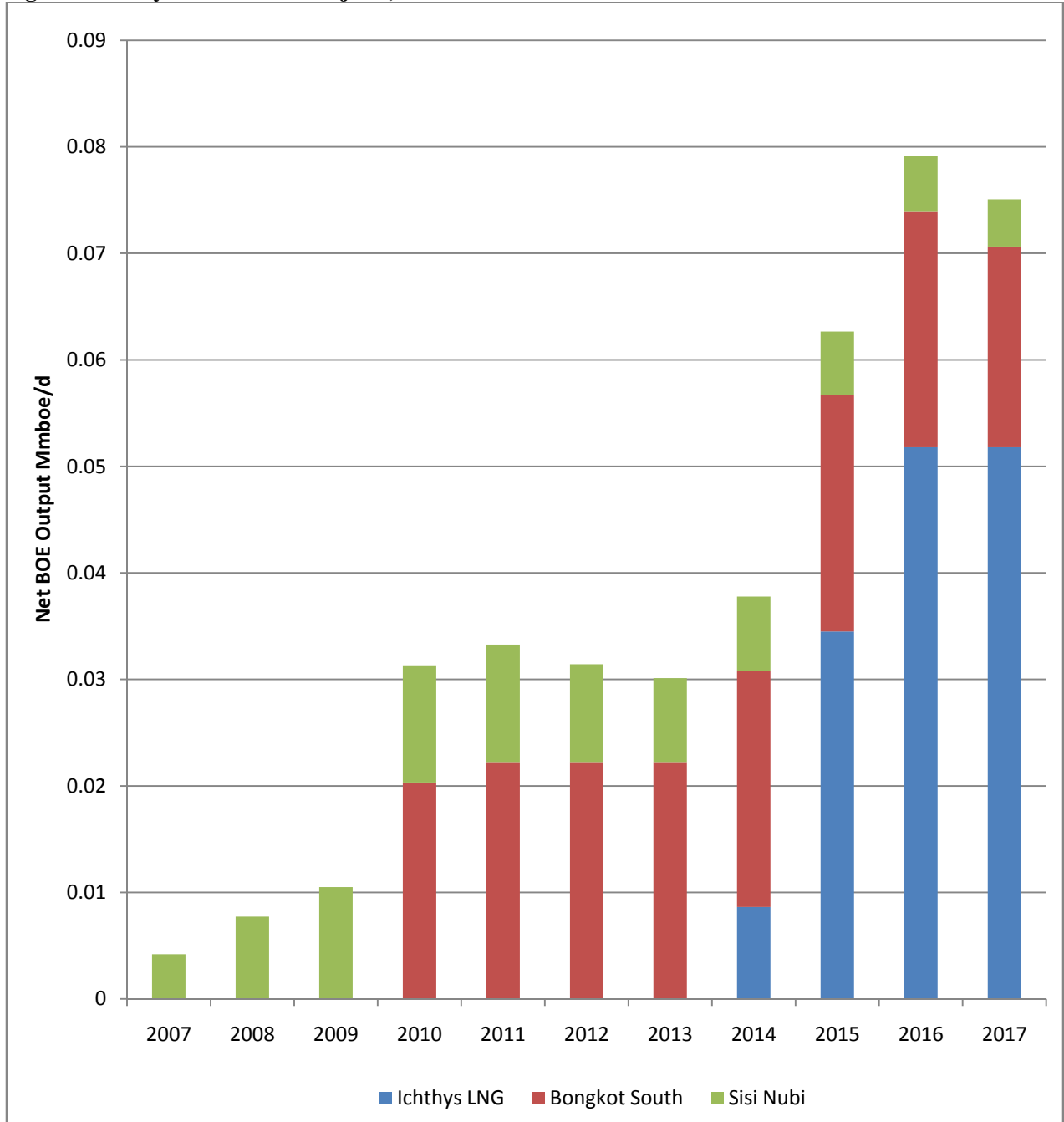


Source: GES Corporate Models Database

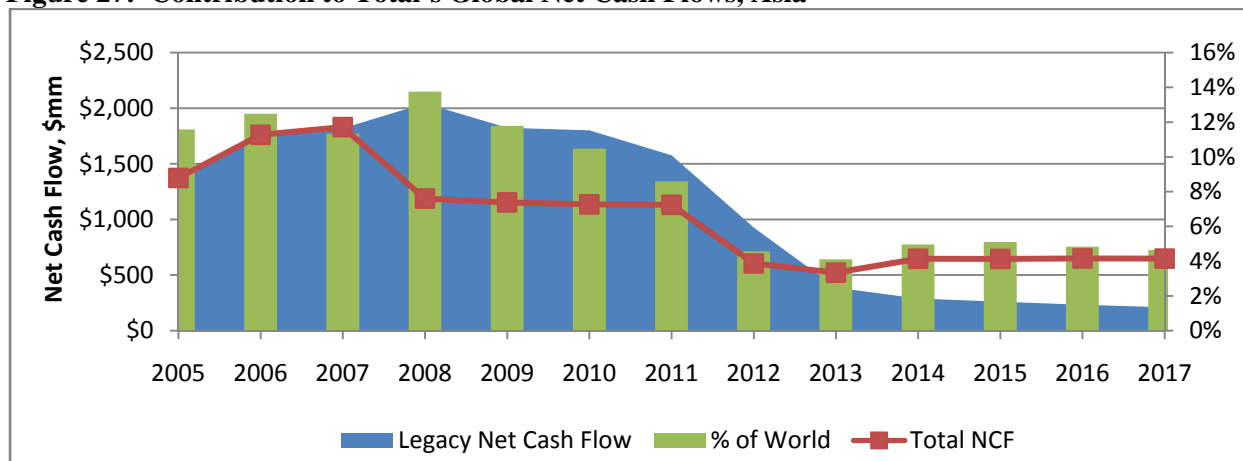
The average base asset decline rate is projected to average roughly 6.4% per year in the near-term (through 2012) and 8.2% for the longer-term from 2007 through 2017.

The new source portfolio is extraordinarily thin at this time. Figure 26 does not include the Stupa field in Indonesia (development plan was filed in July 2007).

**Figure 26: Key Oil and Gas Projects, Asia**



Source: GES Projects Database and Project Economic Models

**Figure 27: Contribution to Total's Global Net Cash Flows, Asia**

Source: GES Corporate Models Database

From its current level of 12% of worldwide net cash flows, Asia's contribution will fall through 2012 as legacy production declines and the company invests in Bongkot South and the Ichthys project.

### Milestones and Change Catalysts to Watch

#### Indonesia

Milestones Achieved to Date:

- Development plans for Stupa submitted July 2007

#### Thailand

Milestones Achieved to Date:

- Bongkot production license extended ten years (Block B15 until 2022; Blocks B16 and B17 until 2023) clearing the way for Bongkot South development

#### Australia

Milestones Achieved to Date:

- Ichthys reserve estimates upgraded to 12.8 Tcf and 527 Mmbbls condensate; planned startup delayed from EOY 2012 to 2014

#### Change Catalysts:

Key elements of Australia's Green Paper on carbon trading, if implemented in 2010 as suggested, will increase the cost of oil and gas operations in Australia. The large role of future production from Total's Ichthys LNG program in Australia and the substantial land acquisition program implemented around Ichthys leaves the company substantially exposed to the costs and limits as imposed in the program that is finally adopted.

Key factors to watch:

- Annual caps imposed on total emissions and the rate at which the caps decline in the future (the more severe the limits the greater the cost to industries required to purchase permits)
- Policy towards Emissions-Intensive trade-exposed industries
  - Percent of all emission permits available to EITE industries (Green Paper proposes 30%)
  - CO2 emission levels for EITE industries that trigger “free” permit coverage (Green paper proposes 90% of industry average emissions for an intensity level greater than 2,000 tonnes CO2 per \$million in revenue and 60% for industries with intensities between 1,500 and 2,000 tonnes CO2 (note: oil and gas emissions intensity is 1,186 tonnes CO2 per \$million revenue and, therefore, below the subsidy limit).
- The comprehensiveness of the CO2 accounting calculations: can Australian LNG producers offset CO2 generated in producing natural gas and converting it to LNG by CO2 savings “at the burner tip” in the consuming country

Other Change Catalysts to Watch:

- Likely prices for Ichthys LNG are likely to be linked to oil prices and economics will, therefore, fluctuate with oil prices
- The viability and timing of an Ichthys project may be altered by the intense competition among NW Shelf players to develop their gas reserves. Key competing projects to watch in this area include: Pluto (Woodside); Gorgon (Chevron, ExxonMobil and Shell); and Wheatstone (Chevron).
- Total has greatly expanded its acreage position in recent years including multiple blocks in the vicinity of Ichthys. Additional discoveries such as the Mimia-1 gas/condensate discovery on WA-344-P are essential if Total is to build Australian operations as a major new source of growth

In addition, Total entered Vietnam on 20 August 2007 when it farmed into a 35% interest in Block 15-1/05. The company has also taken two shallow water blocks in Malaysia, Blocks PM303 and PM324.

## Europe

Europe, like Africa, has been an essential core area and continues to be a key portion of the production base.

### Average Daily BOE Output, Mboe/d

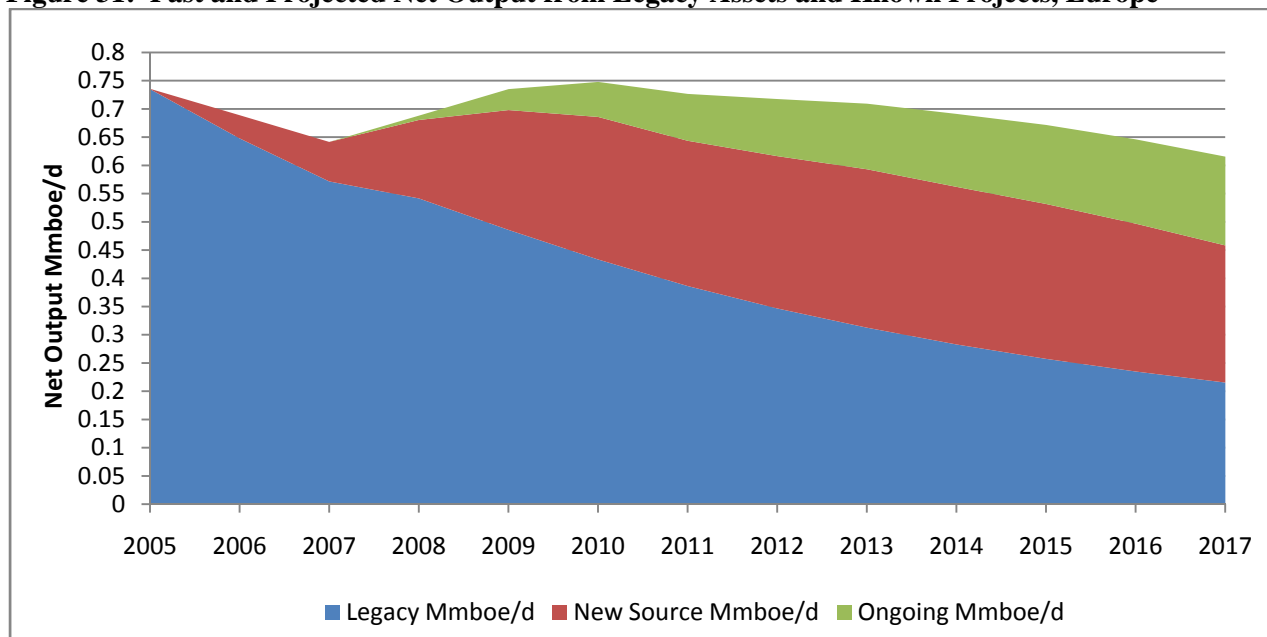
Country	2003	2004	2005	2006	2007
France	35.5	32.8	26.5	26.7	25.2
Netherlands	55.0	56.0	48.2	42.2	43.0
Norway	393.2	392.2	369.3	358.0	325.2
UK	357.3	312.7	289.8	266.5	249.3
<b>Total</b>	<b>841.0</b>	<b>793.7</b>	<b>733.8</b>	<b>693.3</b>	<b>642.7</b>

Source: GES Company Production Source Database; Company Statistical Supplements.

European production has fallen significantly on a year over year basis in each of the last four years.

At this time we anticipate that European production will stabilize in 2008 (possibly even up slightly) and will return back to 2005 production rates by 2010. After 2010 production will fall again but at a relatively modest rate.

**Figure 31: Past and Projected Net Output from Legacy Assets and Known Projects, Europe**

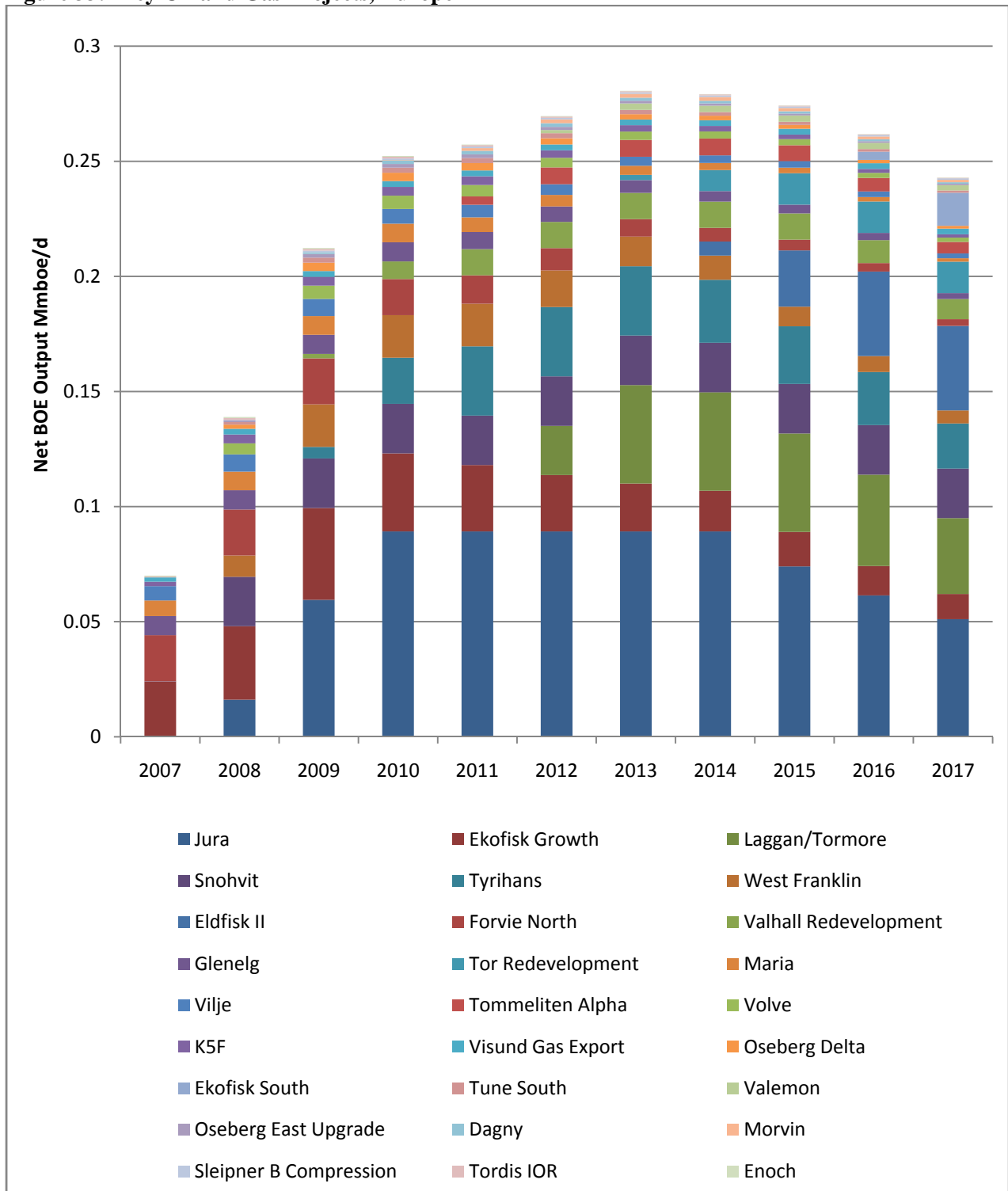


Source: GES Corporate Models Database

The base decline rate averages 9.5% through 2012 and 9.3% from 2012 through 2017.

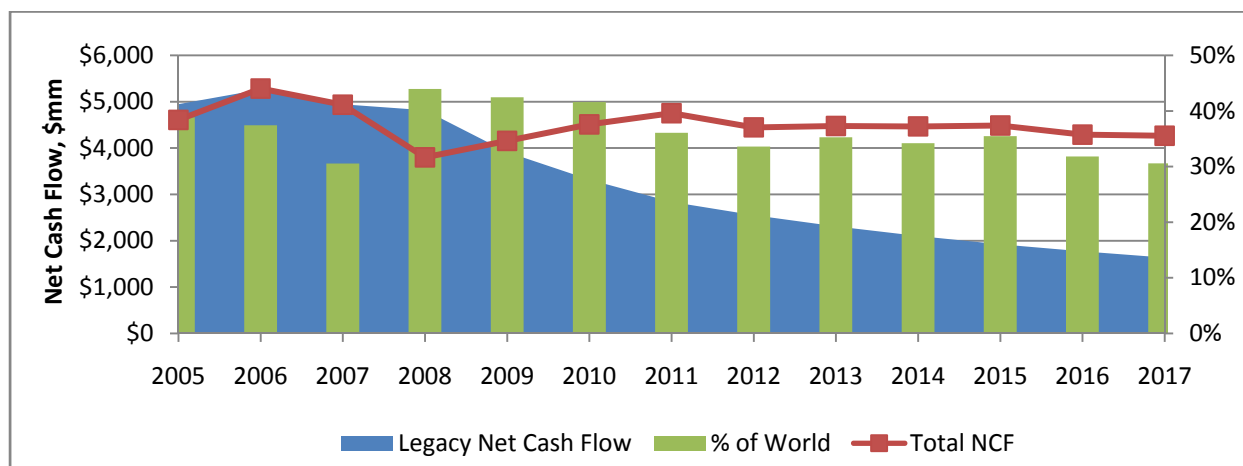
The portfolio of new source projects is substantial both in terms of projected future production rates from this portfolio and in terms of the number of projects in hand. As shown below, there are a large number of projects but note that Jura plays a critical role in future new source output.

Figure 33: Key Oil and Gas Projects, Europe



Source: GES Projects Database and Project Economic Models

After dipping slightly in 2008, net cash flows from European operations are sustained throughout the forecast period. Europe’s share of global net cash flows remains at or near 35%.

**Figure 34: Contribution to Total's Global Net Cash Flows, Europe**

Source: GES Corporate Models Database

## Milestones and Change Catalysts to Watch

### UK

Milestones Achieved to Date:

- Jura online 20 May 2008
- Additional HP/HT discoveries have been made in the Jura area (Islay discovered 4 June 2008) and may be tied into existing infrastructure

Laggan/Tormore is included in Total's new project portfolio. However, this field may be delayed or not developed.

Total is participating in the West of Shetlands Task Force with BP, DONG, ExxonMobil and Chevron. This task force is seeking a joint development solution for multiple discoveries in the area.

Change Catalysts:

- Resolution of disputes over a joint development plan will enable new UK policy makers and West of Shetlands Task Force were reported in June 2008 to be in disagreement over the prospects of development due to costs and taxes. Phase 1 of the task force concluded in September 2007 that no development solution meets economic hurdles in the current cost and tax environment. Total prefers a sub-sea solution with a pipeline to the Sullom Voe processing facility. The Government is reported to support a more infrastructure-intensive solution involving a deepwater platform.
- Phase 2 of the task force began in September 2007 with planned completion by the second quarter 2008. Phase 2 will focus on commercial principles, attempt to clarify reserves based on appraisal drilling and review possible fiscal options that can enable development

## North America

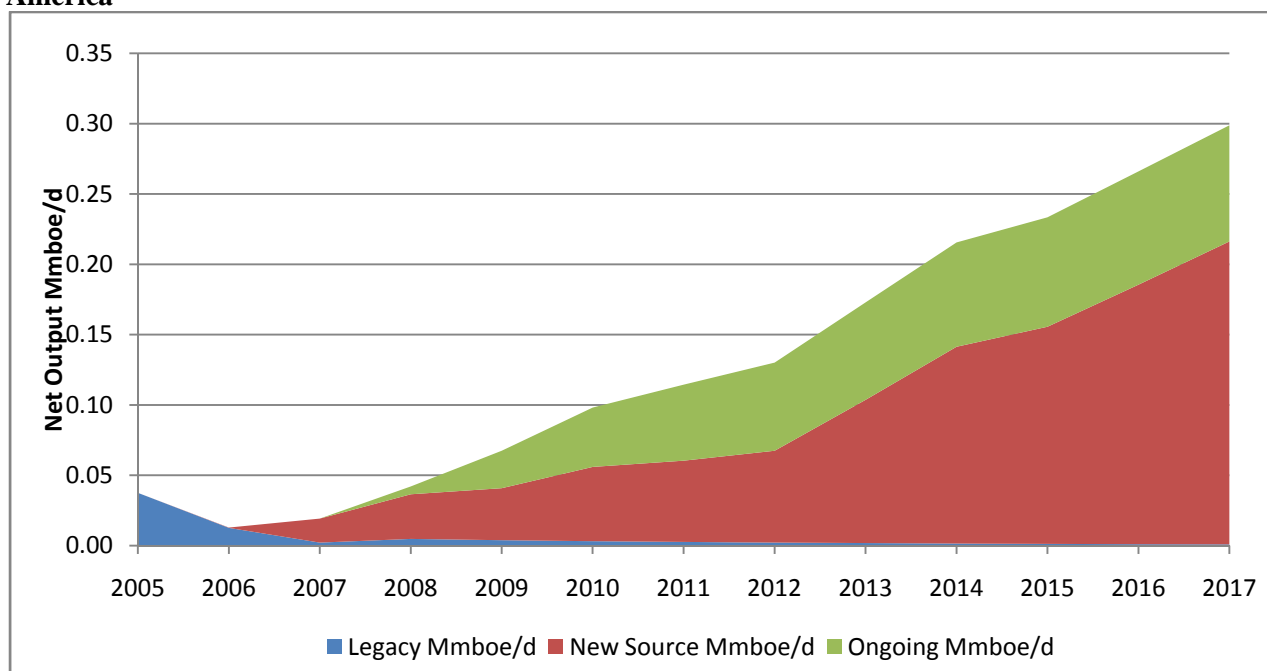
At this time North America is a minor production source for Total. Nevertheless, the region (particularly Canada) has clearly emerged as one of the leading areas of focus for future oil production. The specific focus is on oil sands with large interests in the Surmont and Joslyn projects and a successful US\$507 million bid to acquire Synenco whose main asset is a 60% interest in the proposed Northern Lights mining project.

### Average Daily BOE Output, Mboe/d

Country	2003	2004	2005	2006	2007
Canada	0.0	0.0	0.8	1.0	2.0
US	53.0	56.2	38.0	13.8	17.7
<b>Total</b>	<b>53.0</b>	<b>56.2</b>	<b>38.8</b>	<b>14.8</b>	<b>19.7</b>

Based on current project interests Total's North American production is projected to rise throughout the forecast period from 2007 levels of 20 Mboe/d to 300 Mboe/d by 2017. These estimates do not include Northern Lights. If this project moves forward at its recently revised proposed schedule gross bitumen output will be 114.5 Mboe/d on an annualized rate in 2015.

**Figure 36: Past and Projected Net Output from Legacy Assets and Known Projects, North America**



Source: GES Corporate Models Database

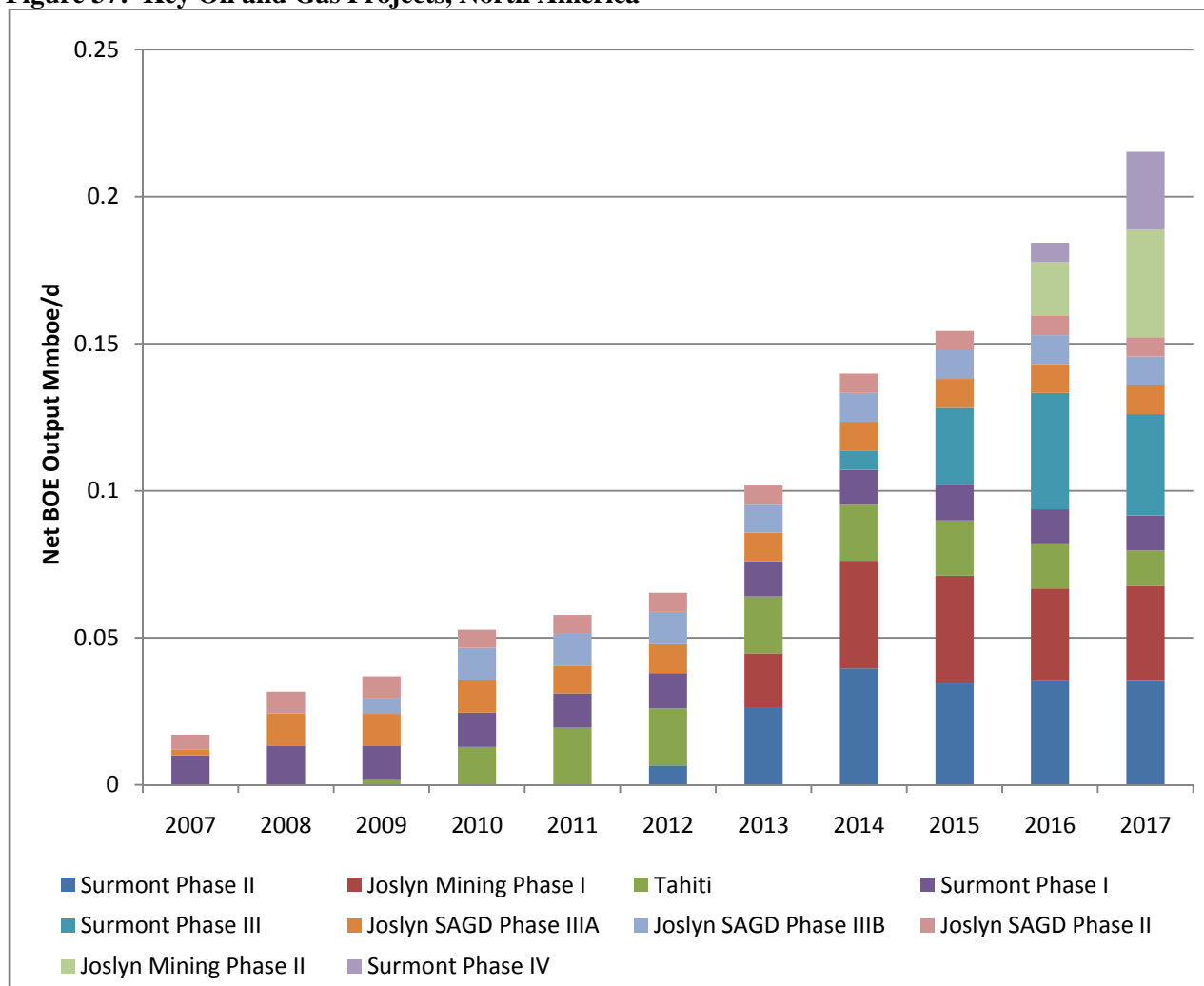
As is customary, Total's oil sands project portfolio involves multi-phase expansions over an extended period of time. The result, as shown below, is a progressive ramp-up of output over time with multiple sources of output emerging.

However, Total's North American assets are very limited in terms of the number and the range of projects when viewed from a full field development perspective. The company's assets fundamentally reduce to two oil sands projects (Surmont and Joslyn with Northern Lights now a possible after the Synenco deal)

and one major deepwater Gulf of Mexico project (Tahiti). Unforeseen events at a single project can, therefore, have profound effects on the company’s forecast.

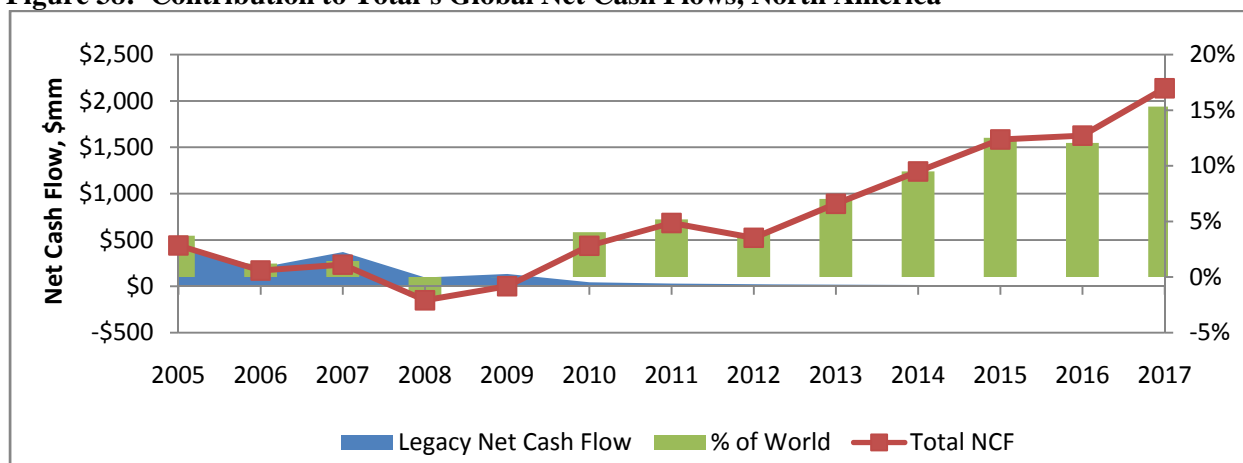
In addition, while Total has recently acquired some North American acreage other than in the oil sands sector, these efforts have not been of a scale that one might expect from a company in this peer group nor are they reflective of the strategic approach Total typically applies in most of its other efforts worldwide. Specifically, the new business development program in the deepwater Gulf of Mexico has been small in scale, efforts have been intermittent and the program has been largely ineffective.

**Figure 37: Key Oil and Gas Projects, North America**



Source: GES Projects Database and Project Economic Models

North American net cash flows have been a negligible part of the overall company. Based on the projects in hand, net cash flow is projected to rise from the current negative position to as much as US\$2 billion by 2017. By the end of the forecast period North America is projected to supply more than 15% of worldwide net cash flow.

**Figure 38: Contribution to Total's Global Net Cash Flows, North America**

Source: GES Corporate Models Database

### Milestones and Change Catalysts to Watch

- Surmont Phase I online 11 December 2007 (first steam injection began June 2007)
- Total acquires Synenco (60% interest in Northern Lights oil sands project) on 6 August 2008

### Change Catalysts:

- Public policy towards future oil sands projects could become more restrictive
  - Possible rising government take: Oil sand royalty rates have already been increased by Alberta
  - Carbon emission and other environmental barriers: On 10 March 2008 the Canadian Federal Government announced that oil sands projects built after 2011 will be required to use carbon capture and storage by 2018
  - Government mandated slow-downs: Within Alberta it is likely that project approvals may be slower and phases required to be spread out over longer periods as a means to minimize the spin-off impacts on the provincial economy and to restrain natural gas consumption for oil sands purposes
- The Canadian gas price outlook has significant implications for oil sands costs (both SAGD as well as costs of upgraded to Synthetic Crude Oil (SCO) quality). This outlook will depend on multiple factors including
  - The degree of progress that can be achieved on the currently stalled Mackenzie Gas project
  - The ultimate production potential of emerging shale gas plays in British Columbia and the pace of their development

## Rest of World

### Average Daily BOE Output, Mboe/d

Country	2003	2004	2005	2006	2007
Argentina	59.3	65.2	69.5	73.5	74.8
Bolivia	10.5	16.7	19.2	19.2	24.8
Colombia	36.7	29.3	25.3	20.2	17.7
Iran	50.0	26.0	23.0	20.0	15.0
Qatar	29.2	31.2	31.5	29.5	46.2
Russia	8.0	9.0	8.3	7.3	7.3
Syria	40.0	35.3	25.0	16.3	15.3
Trinidad & Tobago	0.0	0.0	12.3	9.3	9.3
UAE	19.0	17.0	15.2	15.0	12.7
Venezuela	0.0	0.0	114.3	96.5	94.3
Yemen	8.0	7.0	8.0	9.0	9.0
<b>Total</b>	<b>260.7</b>	<b>236.7</b>	<b>351.7</b>	<b>315.8</b>	<b>326.5</b>

Source: GES Company Production Source Database; Company Statistical Supplements

This reporting region encompasses primarily Latin America and the Middle East plus the small Russian position. Latin America includes two distinct sub-regions: the Southern Cone (Bolivia and Argentina plus recently acquired but untested acreage in Chile) and Venezuela, Colombia and Trinidad and Tobago.

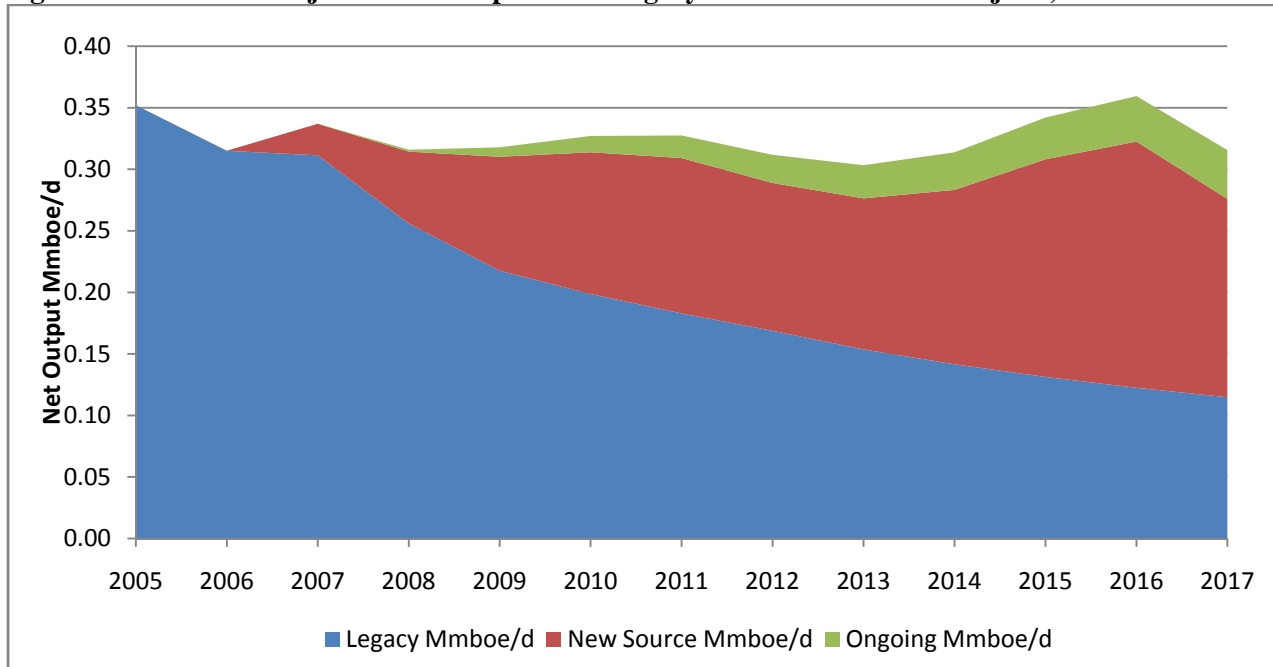
Resource nationalism has severely damaged Total's position in two key Latin America countries (Bolivia and Venezuela) as well as in Russia and Iran.

- Bolivian policy changes have severely impacted the level and pace of development of Total's potential natural gas production.
- Venezuelan net output has fallen under the impact of rising government take and re-negotiation of Sincor with Pdvsa's increased share (Total's working interest was reduced from 47% to 30.323%)
- Efforts to grow in the Middle East have been frustrated
  - Major growth plans for LNG in Iran have failed largely because of the country's intransigence on terms and its political risk
  - The exploration program in the southern Rub Al-Khali failed and Total has relinquished its interest

Other producing countries in this segment (other than Qatar) are in decline or have been stagnant.

GES projections show net output fluctuating around an essentially flat level throughout the forecast period.

**Figure 36: Past and Projected Net Output from Legacy Assets and Known Projects, Rest of World**

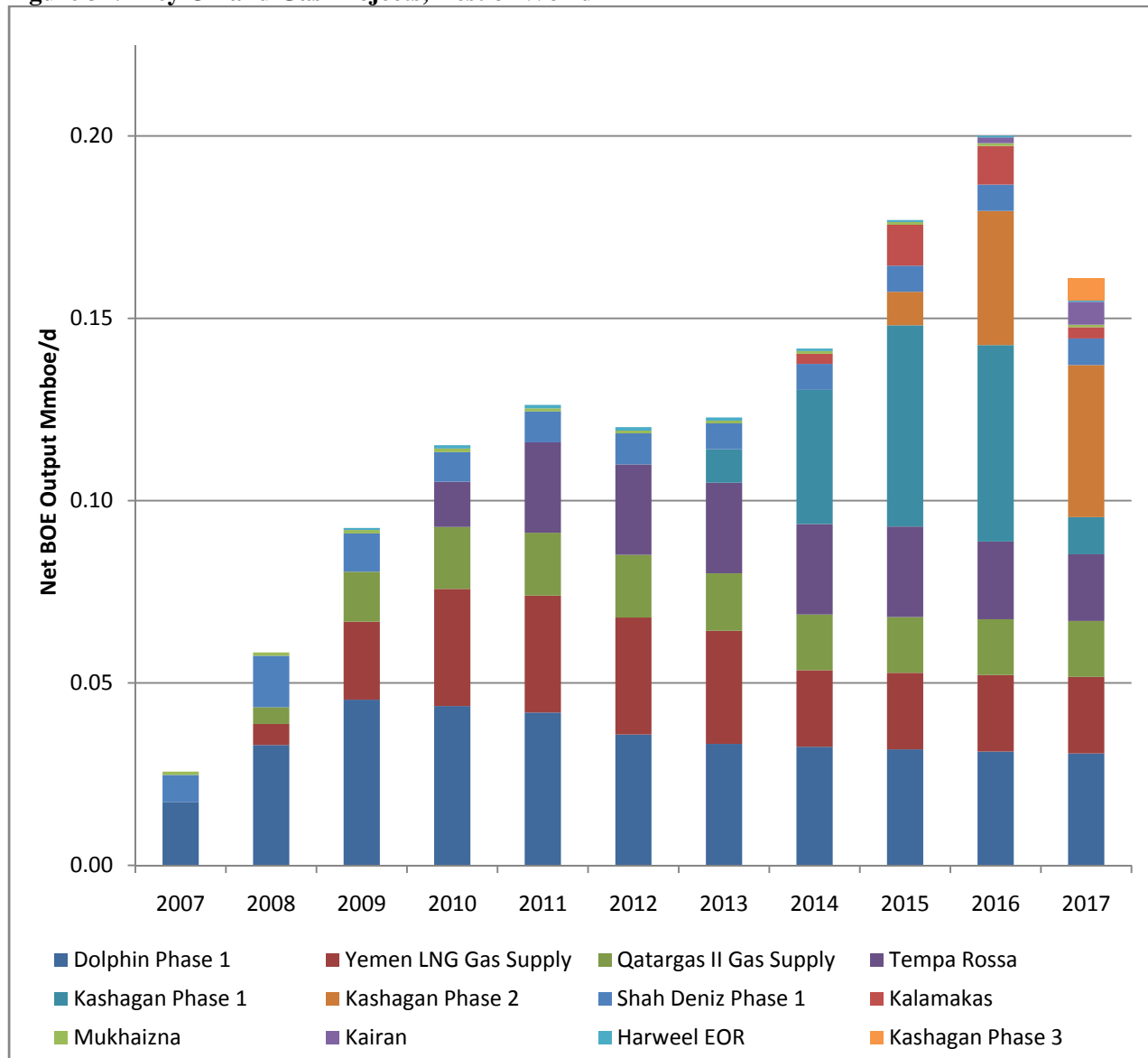


Source: GES Corporate Models Database

A number of major projects are due to come online or rise to peak volumes in the forecast period including Dolphin Phase 1, Yemen LNG, Qatargas II, Shah Deniz and Kashagan. However, declines at legacy fields and the scattered timing of the major projects in this segment are a major drag on growth potential.

The base decline rate is estimated at 11.5% from 2007 through 2012 and 9.5% over the longer term through 2017.

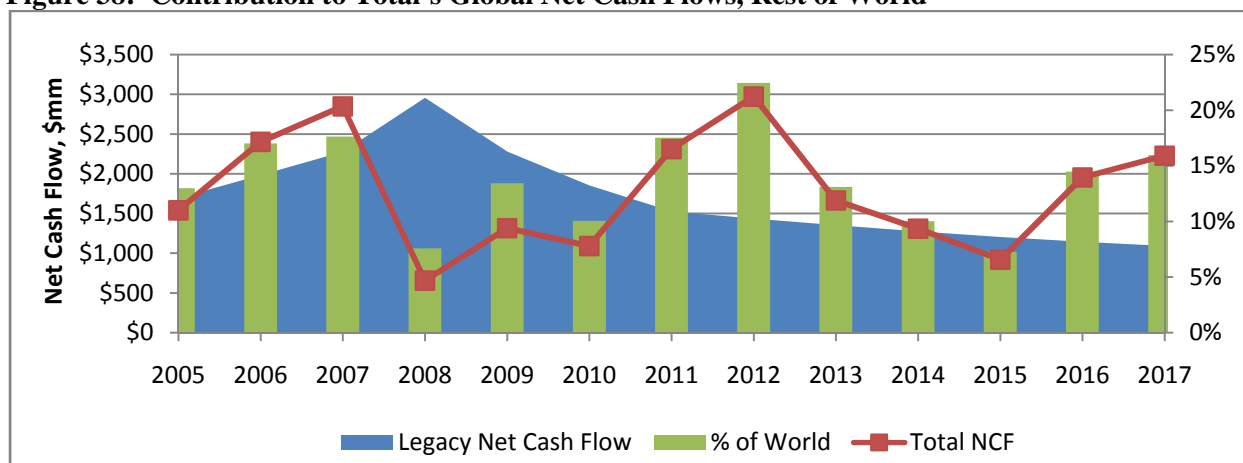
**Figure 37: Key Oil and Gas Projects, Rest of World**



Source: GES Projects Database and Project Economic Models

Middle East gas and Shah Deniz are the key drivers of new source production in the near to medium-term. After 2013 Kashagan production becomes the major factor.

Reflecting the periodic startup of major projects, net cash flow fluctuates widely over the forecast period, varying between 5% and 20% of worldwide cash flows.

**Figure 38: Contribution to Total's Global Net Cash Flows, Rest of World**

Source: GES Corporate Models Database

### Milestones and Change Catalysts to Watch

- Settlement of the continuing Kashagan dispute over costs and startup delays has been costly but, for now at least, delay of startup to EOY 2013 has been approved
- Framework agreement giving Total a 25% interest in a special purpose vehicle that will develop infrastructure for Shtokman Phase 1 in the Barents Sea; FEED began with StatoilHydro's entry in February 2008
- Joint study agreement signed with Pdvsa for Junin 10 Orinoco block
- Entered Chile on 21 November 2007 with the award of the Otway Block (100%; 5965 sq km)

### Change Catalysts:

- Kazakh public policy towards previously negotiated PSC projects is a very significant source of risk for Total's assets.
  - The government may also impose export tax on other projects.
  - Among the Working Group proposals to change Kazakh taxes the following components could materially harm Chevron's Kazak operations if they are extended to the PSC asserts:
    - Increase the export tax rate from the current 0% to 33% range to 22% to 57%
    - Establish a new minerals production tax in lieu of the royalty and levy this tax at higher rates (5% to 20% based on output)
    - For both the export tax and minerals production tax, disallow transportation costs as a reduction in the tax base
- The Shtokman project agreement leaves control of production, transport and marketing with Gazprom.
  - The performance of this project is therefore subject to significant risks associated with its role in Gazprom's overall strategy, pricing decisions as well as broader Russian energy policy.
  - While details are not available, the compensation arrangement seems to be somewhat similar to buy-back agreements although there may be some form of upside value.

## Equity Affiliates

### Average Daily BOE Output, Mboe/d

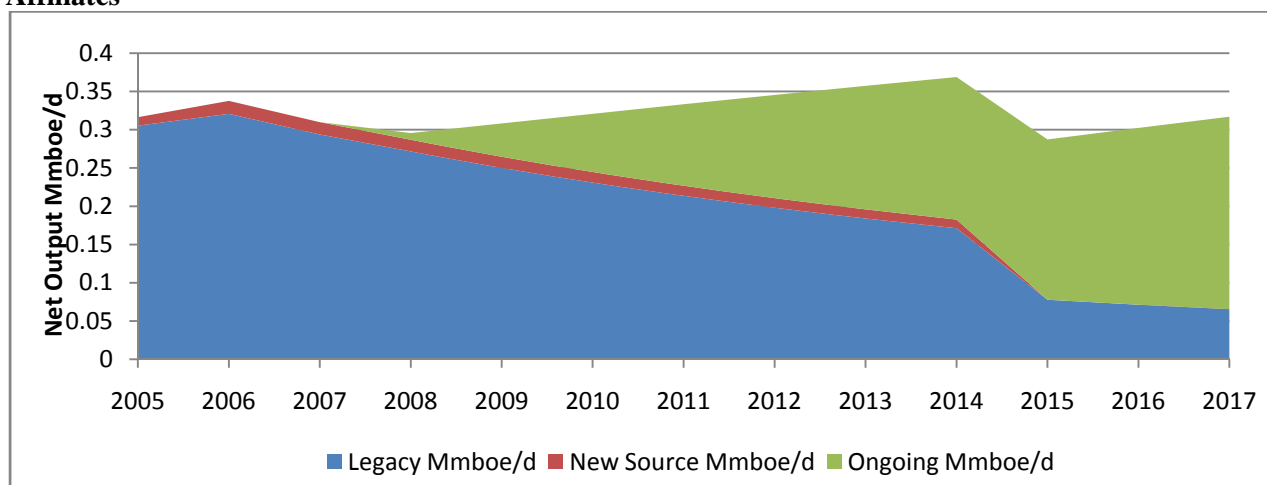
Country	2003	2004	2005	2006	2007
UAE NCI	289.0	289.3	289.8	309.8	286.2
Algeria NCI	34.0	37.7	24.7	25.7	23.7
<b>Total</b>	<b>323.0</b>	<b>327.0</b>	<b>314.5</b>	<b>335.5</b>	<b>309.8</b>

Source: GES Company Production Source Database; Company Statistical Supplements

The company's long-standing equity affiliate position in Abu Dhabi continues to be the primary asset held in this segment. These include a 9.5% interest in ADCO, 13.3% in ADMA and 15% interest in GASCO. Equity production in Algeria is from Total's share in Cepsa and consists of the RKF and Ourhoud fields.

With limited new projects, we project essentially flat production from these assets. This could be optimistic as the forecast hinges on continuing additions from ongoing operations.

**Figure 39: Past and Projected Net Output from Legacy Assets and Known Projects, Equity Affiliates**



Source: GES Corporate Models Database

New source output is limited to small volumes from GASCO. The forecast does not include the ADCO SAS expansion program which is planned to increase output from Sahil, Asab and Shah fields by 60 Mb/d. It is currently expected that this project will be online by 2010. It is not included here because the net volumes to Total (9.5% interest) are not material.

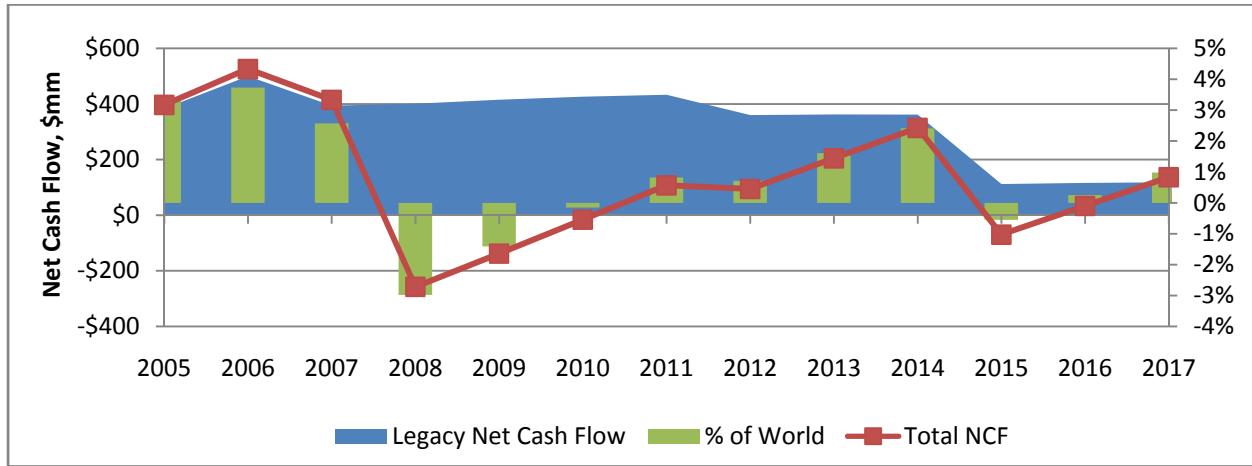
### Figure 43: Key Equity Affiliates Oil and Gas Projects

This graph is omitted due to the absence of major development projects.

Source: GES Projects Database and Project Economic Models

Because of the nature of the assets in this segment net cash flows are minor despite the relatively large production volumes.

**Figure 44: Contribution to Total's Global Net Cash Flows, Equity Affiliates**



Source: GES Corporate Models Database