WHY INVESTOR IN OIL AND GAS SHOULD NOT FEAR A PIVOT TO RENEWABLES

COMPARISON OF INVESTMENT RETURNS

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Investors in oil and gas firms should not fear the transition to renewable energy. The return on capital in renewables is slightly higher than the oil and gas sector, and return on equity nearly double.

- Over the last 6 years the return on invested capital in the renewable energy sector has been slightly higher than that in the oil and gas sector (4.9% compared to 4.7%). However, the return on equity in renewables has been nearly double that of the oil gas sector (8.6% compared to 4.5%).

- In this period oil prices have averaged a broadly healthy $60/bl (WTI). After Covid and the recent unravelling of OPEC, oil prices are likely to be lower for the foreseeable future than in recent years. If WTI settled in the $40-60/bl range, ROIC for oil and gas majors would be expected to be in the 2-6% range with an average of 4%. This compares to the renewables sector with an average ROIC of c.5.0%.

- The analysis here likely under-represents returns for the renewable energy sector as a whole, as the sample includes renewable funds that tend to invest in operating assets and excludes earlier stage developers (they are mostly privately held or form part of larger utilities). In the sample, Orsted takes most early stage development risk (in offshore wind) and has benefitted significantly from selling down equity in completed projects. Gains of sell-downs, whilst exceptional from an accounting point of view, are a source of value creation once a project is de-risked.

- Higher returns to equity for renewable funds are not a result of higher leverage. On average renewable energy firms have similar levels of debt to oil and gas companies (30-40% of total capital). Renewable firms prefer to retain modest levels of debt at the corporate level, using project finance for the very largest onshore wind or solar projects, and offshore wind projects. This enables them to remain flexible with investment opportunities and ride variations in income due to changes in output and electricity prices.

- The recent collapse in oil prices is not captured in this analysis, but shows the long term risk to earnings in the oil and gas sector. Earnings from renewable power are typically more stable, especially when under a long term offtake, such as a corporate power agreement or a subsidised contract with the government. They are however are not immune from market risk. Offtake contracts can be linked to wholesale prices and after the end of the fixed price period (often 15 yrs) the asset will operate on a fully merchant basis exposed to prevailing wholesale prices.
Introduction and approach

This analysis compares the financial performance from 2014 to 2019 of 7 oil and gas majors (BP, Shell, Total, Repsol, ENI, Equinor and Exxon) and 6 pureplay renewable quoted renewable businesses, mostly in the UK (Greencoat Wind, Orsted, Bluefield Solar, The Renewable Infrastructure Group (TRIG), Nextenergy and Foresight Solar). Engie is included for comparison as a diversified utility rapidly developing renewable capacity. In 2019 only 21% of Engie revenues came from renewable generation, the remainder from gas, coal and nuclear power, and network operations.

2014 -2019 was used for the analysis as this is the longest period of consistent financial data for quoted renewable firms, and is a representative operating environment for the oil and gas sector - it captures the last year of the very high oil price in 2014, the collapse in 2015 and 2016, and then a relatively stable period of $50-65/bl to 2019. It also represents the current cost of having to secure new upstream assets rather than relying on legacy assets.

These renewable companies mostly focus on low risk asset operation, acquiring existing assets or those in construction/late stage development. Earlier stage developers can earn higher returns, but take more risk. Two metrics are used in this analysis: Return on Invested Capital (ROIC) and Return on Equity (RoE):

- **ROIC** shows returns after tax but before interest payments in relation to total equity and long term debt. This is measure of the productivity of total capital used in the business. The ROIC measure uses earnings from continued operations, excluding income from unusual activities, such as divestments. These unusual activities can make a significant difference between return on capital and return on equity. For example Orsted gained significantly from the sell-down of equity in 2017 and 2018 for its North Sea wind farms, and BP’s income in 2015 and 2016 was badly affected by provisions for Deep Water Horizon. The effect of sell-downs and exceptional items are included in return on equity (below).

- **RoE** – shows returns available to equity after exceptional items, interest and tax. Selling down equity is a common form of income for renewable developers and increasingly seen as part of the business case for investment. These are part of the reason for Orsted’s 20+% return on equity in 2016, 2017 and 2018. RoE also includes the income effect of changes in the value of assets. This particularly affects renewable funds which periodically have to revalue their assets, and makes their returns appear more volatile than they are on a cash basis. Several of the funds have made material changes to their asset values due to changes in discount rates and forecasts of future power prices – in particular lower forecasts in 2019. Taking an average return over the period smooths these effects.

In view of these points the comparisons show here provide general trends and are best viewed as averages across the group and over time. Each business has specific reasons for performance in a given year.
**Equinor** ROIC considerably higher than peers due to focus on upstream business without lower margin refineries like other oil majors. Profits high when crude prices are high, but less resilient when oil prices are low.

**Repsol** 2019 earnings significantly reduced by impairment due to expected reductions in future oil and gas prices (partly due to climate policies). Cashflow from ongoing operations in 2019 up 8% on 2018.

Foresight Solar and Greencoat Wind profits hit by downgraded asset valuations in 2019 due to lower long term power price forecasts from external consultants. Cashflows in year and dividends unaffected.

source: Capital IQ. ROIC uses a standard 0.625 reduction factor applied to pretax income.
Return on Invested Capital - Oil & Gas Majors vs UK Renewable Firms 2014 - 2019

- Average Return on Invested Capital has been slightly higher for renewable funds than oil and gas majors (excluding Equinor) in the period 2014-2019, with less variability across companies.
  - **Oil and gas majors**: Average ROIC = 4.7%
  - **Renewable funds**: Average ROIC = 4.9% (excl Engie)
- Average oil price during this period has been $60/bl (WTI)

source: Capital IQ. ROIC uses a standard 0.625 reduction factor applied to pretax income.
Average is a simple average, not weighted.
• Return on Equity is more variable than ROIC due to the effect of exceptional gains and losses and gearing – higher during good years, lower during poor years.

• Oil price collapse in 2015 pushed many oil majors into negative returns on equity, due to overhang of fixed costs and debt from previous high oil price years.

**Return on Equity (%) - Oil & Gas Majors**

- BP
- Shell
- Total
- Equinor
- Repsol
- Exxon

**Return on Equity (%) - Renewable Funds**

- Greencoat Wind
- NextEnergy
- Foresight Solar
- Bluefield Solar
- Engie
- Orsted
- Renewables Infrastructure Group

**WTI oil price ($/bl nominal)**

- 2014
- 2015
- 2016
- 2017
- 2018
- 2019

**GB Power price (GBP/MWh)**

- 2014
- 2015
- 2016
- 2017
- 2018
- 2019

**Repso**l 2019 earnings significantly reduced by impairment due to expected reductions in future oil and gas prices (partly due to climate policies). Cashflow from ongoing operations in 2019 up 8% on 2018.

source: Capital IQ
Average Return on Equity has been considerably higher for renewable firms than oil and gas majors in the period 2014-2019:

- **Oil and gas majors** : Average ROE = 4.5%
- **Renewable funds** : Average ROE = 8.6%

The spread of returns between companies in the renewables sector is much less than oil & gas majors.

Source: Capital IQ. Averages are simple averages, not weighted.
• Renewable funds and oil & gas majors have similar average levels of gearing.
• Most renewable funds operate with modest levels of debt at the corporate level and fund projects on balance sheet rather than through project finance.

**Average gearing (total debt/capital)**

- **Avg = 32.9%**
- **Avg = 34.2%**

source: Capital IQ, Company Annual Reports
Looking forward

- After Covid and the recent unravelling of OPEC, oil prices are likely to be lower for the foreseeable future than in recent years.
- Based on the last 6 years data, a long run price of say $40-60/bl, would give ROIC for oil and gas majors of 2 - 6% with an average of 4%.
- This compares to the renewables sector with an average ROIC of c.5.0%.

source: Capital IQ, Company Annual Reports
About Guy Turner

Trove Research is the consulting firm for Guy Turner. Guy is an experienced energy economist with 20 years experience in renewable energy, power markets, oil and gas, and carbon trading. He recently spent 2 years and EDF Renewables managing the London strategy and analysis team, and was involved in market analysis and investment appraisal in offshore wind, onshore wind, solar and battery storage in the UK and Ireland. Prior to EDF, Guy worked with BP Economics where he was responsible for global oil supply analysis and was part of the BP long term Energy Outlook team.

Guy was a founding executive in (Bloomberg) New Energy Finance in 2006, where he worked for 8 years, creating the world’s leading research on carbon markets and later launching the company’s power and gas services, overseeing the long term energy modelling and consulting services.

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