

Registration number: 539964

Shell Research Limited

Annual Report

and

Financial Statements

For the year ended 31 December 2018

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Shell Research Limited

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Shell Research Limited

Strategic report for the year ended 31 December 2018

The Directors present their strategic report on Shell Research Limited (also referred to as the "Company") for the year ended 31 December 2018.

The Company is one of the entities within the "Shell Group". In this context the term "Shell Group" and "Companies of the Shell Group" or "Group companies" means companies where Royal Dutch Shell plc, either directly or indirectly, is exposed to, or has rights to, variable returns from its involvement with the Company and has the ability to affect those returns through its power over the Company. Companies in which Group companies have significant influence but not control are classified as "Associated companies". Royal Dutch Shell plc, a company incorporated in England and Wales, is known as the "Parent Company" of the Shell Group. In this report "Shell", "Shell Group" and "Royal Dutch Shell" are sometimes used for convenience where references are made to Royal Dutch Shell and its subsidiaries in general. These expressions are also used where no useful purpose is served by identifying the particular company or companies.

Business review

The principal activities of Shell Research Limited are to provide research and other related services to other companies of the Shell Group and third parties, and the licensing of technology and patents to third parties.

The Company's result for the year is a loss of GBP 2,820,000 (2017: Profit of GBP 264,000). This decrease was mainly due to reduced royalty income during the year.

The Directors consider that the year-end financial position of the Company was satisfactory.

Principal risks and uncertainties

The Shell Group has a single risk based control framework - The Shell Control Framework - to identify and manage risks. The Shell Control Framework applies to all wholly owned Shell companies and to those ventures and other companies in which Royal Dutch Shell has directly or indirectly a controlling interest. From the perspective of the Company, the principal risks and uncertainties affecting the Company are considered to be those that affect the Shell Group. Accordingly, the principal risks and uncertainties of the Shell Group, which are discussed on pages 15 to 20 of Royal Dutch Shell's Annual Report and Form 20-F for the year ended 31 December 2018 (the "Group Report"), include those of the Company. (The Group Report does not form part of this report).

Shell Research Limited

Strategic report for the year ended 31 December 2018 (continued)

Key Performance Indicators

Companies of the Shell Group comprise the Upstream businesses of Exploration and Production, Integrated Gas and New Energies, Oil Sands and the Downstream businesses of Oil Products and Chemicals. The Company's key performance indicators, that give an understanding of the development, performance and position of the business, are aligned with those of the Shell Group. The development, performance and position of the various businesses is discussed on pages 29 to 61 of the Group Report and the key performance indicators through which the Group's performance is measured are as set out on pages 27 to 28 of the Group Report.


Human Rights

Respect for human rights is embedded in the Shell Group's Business Principles and Code of Conduct. This approach is informed by the Universal Declaration of Human Rights, the core conventions of the International Labour Organization and the United Nations' Guiding Principles on Business and Human Rights.

The Shell Group works closely with other companies and non-governmental organisations to continuously improve the way it applies these principles, with a focus on four key areas: communities, security, labour rights, and supply chain. The Shell Group has systems and processes in place for managing projects, contracting and procurement, recruitment and employment, security and social performance and requires all Group companies and contractors to respect the human rights of their workforce and neighbouring communities. The Shell Group's Modern Slavery Statement provides more details about the process applied. It can be found at www.shell.com/uk-modern-slavery-act.html.

Approved by the Board on 19 September 2019

and signed on its behalf by:

Designated by:

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Alice Alfert
Authorised signatory for
Shell Corporate Secretary Limited
Company secretary

Shell Research Limited

Directors' report for the year ended 31 December 2018

The Directors present their report and the financial statements for the year ended 31 December 2018.

The Directors' report and audited financial statements of the Company have been prepared in accordance with the Companies Act 2006.

Dividends

No dividends were paid during the year (2017: £nil).

Future Outlook

No significant change in the business of the Company has taken place during the year or is expected in the immediately foreseeable future.

Research and development

Shell Research Limited manages an annual programme of research & development on behalf of the Shell Group. The research relates to the development and formulation of fuels and lubricants to support the technology vision of the downstream businesses.

Directors of the Company

The Directors, who held office during the year, and to the date of this report (except as noted) were as follows:

C. Boulanger (resigned 1 June 2018)

I. Galliard (resigned 5 February 2019)

A.J. Gosse (appointed 24 May 2018)

S. Martin

C. Seabrook (resigned 1 October 2018)

Shell Corporate Director Limited (appointed 13 July 2018)

Financial risk management

The Company's Directors are required to follow the requirements of Shell Group risk management policies, which include specific guidelines on the management of market, credit and liquidity risk, and advice on the use of financial instruments to manage them. Shell Group risk management policies can be found in the Group Report (see pages 103 to 104 and note 19).

Shell Research Limited

Directors' report for the year ended 31 December 2018 (continued)

Employee involvement

The Company has a comprehensive policy concerning information provision and consultation with employees. Its objective is to meet their needs for information and involvement in issues affecting them, and to contribute to the management of change in the organisation.

The primary responsibility for information and consultation rests with management. It is supplemented by representative bodies at some employment locations. In addition, there is a well-established system by which the senior management in the Company makes presentations to employees on business results and plans. This is in turn supplemented by in-house journals, briefing papers, management letters and video presentations.

All of the formal employee representative bodies held regular meetings throughout the year.

Equal opportunities

Shell Research Limited aims to have leading equal opportunities policies and practices. The Company has a published equal opportunities policy and a detailed code of practice in support of this. Progress is regularly monitored. The Company's policy continues to be the application of equal opportunity principles to the selection, training and career development of all applicants and employees, irrespective of gender, race, ethnic origin, marital status, religion or disability.

With respect to disabled people, the Company's medical officers provide appropriate advice to help with the successful achievement of these objectives, particularly regarding physical facilities, which need to be made available at the workplace. Shell Group is part of the Business Disability Forum, which promotes best practice among private sector employers. Shell UK FRS101 Master template is also committed to providing continuing employment of employees who become disabled whilst working for the Company.

The Company offers a range of flexible working conditions to assist employees in balancing work and outside commitments. There are also schemes such as career breaks, six months paid parental leave and a range of childcare support initiatives to support employees with families.

Statement of Directors' responsibilities

The Directors acknowledge their responsibilities for preparing the Strategic report, Directors' report and the Company's financial statements in accordance with applicable laws and regulations.

Company law requires the Directors to prepare financial statements for each financial year. Under that law the Directors have elected to prepare the financial statements in accordance with United Kingdom Accounting Standards (United Kingdom Generally Accepted Accounting Practice), including FRS 101 'Reduced Disclosure Framework' ('FRS 101'). Under company law the Directors must not approve the financial statements unless they are satisfied that they give a true and fair view of the state of affairs of the Company and of the profit or loss of the Company for that period. In preparing these financial statements, the Directors are required to:

Shell Research Limited

Directors' report for the year ended 31 December 2018 (continued)

Statement of Directors' responsibilities (continued)

- select suitable accounting policies and apply them consistently;
- make judgements and accounting estimates that are reasonable and prudent;
- state whether United Kingdom accounting standards have been followed, subject to any material departures disclosed and explained in the financial statements; and
- prepare the financial statements on a going concern basis unless it is inappropriate to presume that the Company will continue in business.

The Directors are responsible for keeping adequate accounting records that are sufficient to show and explain the Company's transactions and disclose with reasonable accuracy at any time the financial position of the Company and enable them to ensure that the financial statements comply with the Companies Act 2006. They are also responsible for safeguarding the assets of the Company and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

Disclosure of information to the auditor

Each Director has taken steps that they ought to have taken as a Director in order to make themselves aware of any relevant audit information and to establish that the Company's auditor is aware of that information. The Directors confirm that there is no relevant information that they know of and of which they know the auditor is unaware.

Approved by the Board on 19 September 2019

and signed on its behalf by:

DocuSigned by:

Alice Allport

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Alice Allport

Authorised signatory for
Shell Corporate Secretary Limited
Company secretary

Independent Auditor's report to the Member of Shell Research Limited

Opinion

We have audited the financial statements of Shell Research Limited (the "Company") for the year ended 31 December 2018, which comprise the Profit and loss account, Balance sheet, Statement of changes in equity, and the related notes 1 to 19, including a summary of significant accounting policies. The financial reporting framework that has been applied in their preparation is applicable law and United Kingdom Accounting Standards, including FRS 101 "Reduced Disclosure Framework" (United Kingdom Generally Accepted Accounting Practice).

In our opinion the financial statements:

- give a true and fair view of the state of the Company's affairs as at 31 December 2018 and of its loss for the year then ended;
- have been properly prepared in accordance with United Kingdom Generally Accepted Accounting Practice; and
- have been prepared in accordance with the requirements of the Companies Act 2006.

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (UK) (ISAs (UK)) and applicable law. Our responsibilities under those standards are further described in the Auditor's responsibilities for the audit of the financial statements section of our report. We are independent of the Company in accordance with the ethical requirements that are relevant to our audit of the financial statements in the UK, including the FRC's Ethical Standard, and we have fulfilled our other ethical responsibilities in accordance with these requirements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Conclusions relating to going concern

We have nothing to report in respect of the following matters in relation to which the ISAs (UK) require us to report to you where:

- the Directors' use of the going concern basis of accounting in the preparation of the financial statements is not appropriate; or
- the Directors have not disclosed in the financial statements any identified material uncertainties that may cast significant doubt about the Company's ability to continue to adopt the going concern basis of accounting for a period of at least twelve months from the date when the financial statements are authorised for issue.

Independent Auditor's report to the Member of Shell Research Limited (continued)

Other information

The other information comprises the information included in the annual report set out on pages 1 to 5, other than the financial statements and our auditor's report thereon. The Directors are responsible for the other information.

Our opinion on the financial statements does not cover the other information and, except to the extent otherwise explicitly stated in our report, we do not express any form of assurance conclusion thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated. If we identify such material inconsistencies or apparent material misstatements, we are required to determine whether there is a material misstatement in the financial statements or a material misstatement of the other information. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact.

We have nothing to report in this regard.

Opinions on other matters prescribed by the Companies Act 2006

In our opinion, based on the work undertaken in the course of the audit:

- the information given in the Strategic report and Directors' report for the financial year for which the financial statements are prepared is consistent with the financial statements; and
- the Strategic report and Directors' report have been prepared in accordance with applicable legal requirements.

Matters on which we are required to report by exception

In the light of our knowledge and understanding of the Company and its environment obtained in the course of the audit, we have not identified material misstatements in the Strategic report and the Directors' report.

We have nothing to report in respect of the following matters where the Companies Act 2006 requires us to report to you if, in our opinion:

- adequate accounting records have not been kept, or returns adequate for our audit have not been received from branches not visited by us; or
- the financial statements are not in agreement with the accounting records and returns; or
- certain disclosures of Directors' remuneration specified by law are not made; or
- we have not received all the information and explanations we require for our audit.

Independent Auditor's report to the Member of Shell Research Limited (continued)

Responsibilities of Directors

As explained more fully in the Statement of Directors' responsibilities set out on pages 4 and 5, the Directors are responsible for the preparation of the financial statements and for being satisfied that they give a true and fair view, and for such internal control as the Directors determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the Directors are responsible for assessing the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the Directors either intend to liquidate the Company or to cease operations, or have no realistic alternative but to do so.

Auditor's responsibilities for the audit of the financial statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs (UK) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

A further description of our responsibilities for the audit of the financial statements is located on the Financial Reporting Council's website at <https://www.frc.org.uk/auditorsresponsibilities>. This description forms part of our auditor's report.

Use of our report

This report is made solely to the Company's member, as a body, in accordance with Chapter 3 of Part 16 of the Companies Act 2006. Our audit work has been undertaken so that we might state to the Company's member those matters we are required to state to them in an auditor's report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the Company and the Company's member as a body, for our audit work, for this report, or for the opinions we have formed.

Ernst & Young LLP

Khilan Shah (Senior Statutory Auditor)
For and on behalf of Ernst & Young LLP, Statutory Auditor
London

Date: *20 September 2019*

Shell Research Limited

Profit and loss account for the year ended 31 December 2018

Continuing operations

	Note	2018 £ 000	2017 £ 000
Turnover	4	156,798	172,733
Cost of sales		<u>(159,870)</u>	<u>(172,307)</u>
GROSS (LOSS)/PROFIT		(3,072)	426
Other income		<u>1,213</u>	<u>1,142</u>
OPERATING (LOSS)/PROFIT	6	(1,859)	1,568
Interest receivable and similar income	5	<u>163</u>	<u>52</u>
(LOSS)/PROFIT BEFORE TAXATION		(1,696)	1,620
Tax on (loss)/profit	9	<u>(1,124)</u>	<u>(1,356)</u>
(LOSS)/PROFIT FOR THE YEAR		<u>(2,820)</u>	<u>264</u>

The loss for the current year and the profit for the prior year are equal to the total comprehensive income and accordingly a statement of comprehensive income has not been presented.

Shell Research Limited

(Registration number: 539964)
Balance sheet as at 31 December 2018

	Note	2018 £ 000	2017 £ 000
Fixed assets			
Tangible assets	10	34	50
Deferred tax	9	254	292
		<u>288</u>	<u>342</u>
Current assets			
Debtors	12	45,312	52,939
		45,312	52,939
Creditors: Amounts falling due within one year	13	(26,798)	(25,861)
Net current assets		<u>18,514</u>	<u>27,078</u>
Total assets less current liabilities		18,802	27,420
Provisions	15	(3,289)	(9,087)
Net assets		<u>15,513</u>	<u>18,333</u>
Equity			
Called up share capital	16	50	50
Profit and loss account		<u>15,463</u>	<u>18,283</u>
Total equity		15,513	18,333

The financial statements on pages 9 to 34 were authorised for issue by the Board of Directors on 19 September 2019 and signed on its behalf by:

DocuSigned by:

Sally Martin

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S. Martin

Director

Shell Research Limited

Statement of changes in equity for the year ended 31 December 2018

	Called up share capital £ 000	Profit and loss account £ 000	Total £ 000
Balance as at 1 Jan 2017	50	18,019	18,069
Profit for the year	-	264	264
Balance as at 31 December 2017	<u>50</u>	<u>18,283</u>	<u>18,333</u>
Balance as at 1 January 2018	50	18,283	18,333
Profit for the year	-	(2,820)	(2,820)
Balance as at 31 December 2018	<u>50</u>	<u>15,463</u>	<u>15,513</u>

Shell Research Limited

Notes to the financial statements for the year ended 31 December 2018

General information

The Company is a private company limited by share capital incorporated in England and Wales. The address of its registered office is: Shell Centre, London, SE1 7NA, United Kingdom.

1 Accounting policies

Basis of preparation

These financial statements were prepared in accordance with Financial Reporting Standard 101 Reduced Disclosure Framework, which involves the application of International Financial Reporting Standards ("IFRS") with a reduced level of disclosure. The financial statements have been prepared under the historical cost convention, except for certain items measured at fair value, and in accordance with the Companies Act 2006.

As applied to the Company, there are no material differences between EU endorsed IFRS and IFRS as issued by the International accounting Standards Board.

The principal accounting policies applied in the preparation of these financial statements are set out below. These policies have been consistently applied to all the years presented, except for the adoption of IFRS 9 and IFRS 15.

New standards applied

The adoption of IFRS 9 and IFRS 15 has had no material impact on the Company's retained earnings or balance sheet as at 1 January 2018.

The preparation of financial statements in conformity with FRS 101 requires the use of certain critical accounting estimates. It also requires management to exercise its judgement in the process of applying the Company's accounting policies. The areas involving a higher degree of judgement or complexity, or areas where assumptions and estimates are significant to the financial statements are disclosed in note 2.

Shell Research Limited

Notes to the financial statements for the year ended 31 December 2018 (continued)

1 Accounting policies (continued)

The following exemptions from the disclosure requirements of IFRS have been applied in the preparation of these financial statements, in accordance with FRS 101:

- IFRS 7, 'Financial Instruments: Disclosures'
- Paragraphs 91 to 99 of IFRS 13, 'Fair value measurement' (disclosure of valuation techniques and inputs used for fair value measurement of assets and liabilities)
- Paragraph 38 of IAS 1, 'Presentation of financial statements' comparative information requirements in respect of:
 - (i) paragraph 79(a)(iv) of IAS 1 'Presentation of financial statements';
 - (ii) paragraph 73(e) of IAS 16 'Property, plant and equipment';
 - (iii) paragraph 118(e) of IAS 38 'Intangible assets' (reconciliation between the carrying amount at the beginning and end of the period)
- The following paragraphs of IAS 1, 'Presentation of financial statements':
 - (i) 10(d), (statement of cash flows);
 - (ii) 10(f) (a balance sheet as at the beginning of the preceding period when an entity applies an accounting policy retrospectively or makes a retrospective restatement of items in its financial statements, or when it reclassifies items in its financial statements);
 - (iii) 16 (statement of compliance with all IFRS);
 - (iv) 38A (requirement to present a minimum of two statements for each of the primary financial statements, including cash flow statements and related notes);
 - (v) 38B-D (additional comparative information);
 - (vi) 40A-D (requirements for a third balance sheet);
 - (vii) 111 (cash flow statement information); and
 - (viii) 134-136 (capital management disclosures)
- The following paragraphs of IFRS 15, 'Revenue from Contracts with Customers'
 - (i) the requirements of the second sentence of paragraph 110 (qualitative and quantitative information about contracts with customers, significant judgements, changes in judgements in applying this standard to those contracts, and assets recognised from the costs to obtain or fulfil a contract);
 - (ii) paragraph 113(a) (revenue recognised from contracts with customers);
 - (iii) paragraphs 114 and 115 (disaggregation of revenue);
 - (iv) paragraph 118 (changes in contract asset and liability);
 - (v) paragraphs 119(a) to (c) and 120 to 127 (performance obligations); and
 - (vi) paragraph 129 (practical expedients).
- IAS 7, 'Statement of cash flows'
- Paragraph 30 and 31 of IAS 8 'Accounting policies, changes in accounting estimates and errors' (requirement for the disclosure of information when an entity has not applied a new IFRS that has been issued but is not yet effective)
- Paragraph 17 and 18A of IAS 24, 'Related party disclosures' (key management compensation)
- The requirements in IAS 24, 'Related party disclosures' to disclose related party transactions entered into between two or more wholly owned members of a group.

Shell Research Limited

Notes to the financial statements for the year ended 31 December 2018 (continued)

1 Accounting policies (continued)

Consolidation

The immediate parent company is The Shell Petroleum Company Limited.

The ultimate parent company and controlling party is Royal Dutch Shell plc, which is incorporated in England and Wales. Royal Dutch Shell plc is the parent undertaking of the smallest and largest group to consolidate these accounts.

The consolidated accounts of Royal Dutch Shell plc are available from:

Royal Dutch Shell plc
Tel: +31 888 800 844
email: order@shell.com
Registered office: Shell Centre, London, SE1 7NA

Taxation

Tax is recognised in profit or loss, except that tax attributable to an item of income or expense recognised as other comprehensive income is also recognised directly in other comprehensive income or directly in equity.

Current tax

The current income tax charge is calculated on the basis of tax rates and laws that have been enacted or substantively enacted by the reporting date for tax payable to HM Revenue and Customs, or for group relief to surrender to or to be received from other Group undertakings, and for which payment may be requested.

Shell Research Limited

Notes to the financial statements for the year ended 31 December 2018 (continued)

1 Accounting policies (continued)

Deferred tax

Deferred tax is recognised on temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the financial statements.

A net deferred tax asset is regarded as recoverable and therefore recognised when, on the basis of the most recent available evidence, it is regarded as probable that there will be suitable taxable profits from which the future reversal of the underlying temporary differences can be deducted.

Deferred tax is measured at the average tax rates that are expected to apply in the periods in which the temporary differences are expected to reverse based on tax rates and laws that have been enacted or substantively enacted by the balance sheet date.

Deferred income tax assets and liabilities are offset when there is a legally enforceable right to offset deferred tax assets against deferred tax liabilities and when the deferred income taxes assets and liabilities relate to income taxes levied by the same taxation authority on either the same taxable entity or different taxable entities where there is an intention to settle the balances on a net basis.

Amounts relating to deferred tax are undiscounted.

Foreign currency translation

(i) Functional and presentation currency

Items included in the financial statements of the Company are measured using the currency of the primary economic environment in which the Company operates ('the functional currency'). The financial statements are presented in Pounds Sterling (£), which is also the Company's functional currency.

(ii) Transaction and balances

Income and expense items denominated in foreign currencies are translated into £ at the rate ruling on their transaction date.

Monetary assets and liabilities recorded in foreign currencies have been expressed in £ at the rates of exchange ruling at the year end. Differences on translation are included in the profit and loss account. Non-monetary assets and liabilities denominated in a foreign currency are translated using exchange rates at the date of the transaction. No subsequent translations are made once this has occurred.

Shell Research Limited

Notes to the financial statements for the year ended 31 December 2018 (continued)

1 Accounting policies (continued)

Tangible fixed assets and depreciation

Tangible fixed assets are stated at cost less accumulated depreciation and provision for impairment. Cost includes the original purchase price of the asset and the costs attributable to bringing the asset to its working condition for its intended use. A review for the potential impairment of a fixed asset is carried out if events or changes in circumstances indicate that the carrying amount of a fixed asset may not be recoverable. If assets are determined to be impaired, the carrying amounts of those assets are written down to their recoverable amount, which is the higher of fair value less costs to sell and value in use. Value in use is determined as the amount of estimated risk-adjusted discounted future cash flows. For this purpose, assets are grouped into cash-generating units based on separately identifiable and largely independent cash inflows. Any impairments are recorded in the profit and loss account.

If, after an impairment loss has been recognised, the recoverable amount of a fixed asset increases because of a change in economic conditions or in the expected use of the asset, the resulting reversal of the impairment loss is recognised in the current year to the extent that it increases the carrying amount of the fixed asset up to the amount it would have been had the original impairment not occurred.

Depreciation and impairment are not normally charged on assets under construction or on freehold land. In the case of these assets, an impairment review would only be undertaken if, and only if, there was a change in circumstances indicating that the carrying amount of the asset may not be recoverable.

Depreciation is charged so as to write off the cost of assets on a straight line basis, other than land and properties under construction over their estimated useful lives, as follows:

Asset class	Depreciation method and rate
Plant and machinery	2.5% - 25.0% per annum
Office furniture & fittings	5% - 33.0% per annum

Shell Research Limited

Notes to the financial statements for the year ended 31 December 2018 (continued)

1 Accounting policies (continued)

Financial instruments

Financial assets

Financial assets are classified at initial recognition and subsequently measured at amortised cost, fair value through other comprehensive income (FVOCI) or fair value through profit or loss (FVTPL). The classification of financial assets is determined by the contractual cash flows and where applicable the business model for managing the financial assets.

A financial asset is measured at amortised cost if the objective of the business model is to hold the financial asset in order to collect contractual cash flows and the contractual terms give rise to cash flows that are solely payments of principal and interest. Financial assets at amortised cost are initially recognised at fair value plus or minus transaction costs that are directly attributable to the acquisition or issue of the financial asset. Subsequently the financial asset is measured using the effective interest method less any impairment. Gains and losses are recognised in profit or loss when the asset is derecognised, modified or impaired. All equity instruments and other debt instruments are recognised at fair value. For equity instruments, on initial recognition, an irrevocable election (on an instrument-by-instrument basis) can be made to designate these as at FVOCI (without recycling to profit and loss) instead of FVTPL. Dividends received on equity instruments are recognised as other income in profit or loss when the right of payment has been established, except when the Company benefits from such proceeds as a recovery of part of the cost of the financial asset, in which case, such gains are recorded in other comprehensive income.

Impairment of financial assets

The impairment requirements for expected credit losses are applied to financial assets measured at amortised cost, financial assets measured at FVOCI and financial guarantees contracts to which IFRS 9 is applied and that are not accounted for at FVTPL and lease receivables under IFRS 15 that give rise to a conditional right to consideration. If the credit risk on the financial asset has increased significantly since initial recognition, the loss allowance for the financial asset is measured at an amount equal to the lifetime expected credit losses. In other instances, the loss allowance for the financial asset is measured at an amount equal to the twelve month expected credit losses (ECLs). Changes in loss allowances are recognised in profit and loss. For trade debtors that do not contain a significant financing component, the simplified approach is applied recognising expected lifetime credit losses from initial recognition.

Financial liabilities

Financial liabilities are measured at amortised cost, unless they are required to be measured at FVTPL, such as instruments held for trading, or the Company has opted to measure them at FVTPL. Debt and trade creditors are recognised initially at fair value based on amounts exchanged, net of transaction costs, and subsequently at amortised cost. Interest expense on debt is accounted for using the effective interest method and is recognised in income.

Shell Research Limited

Notes to the financial statements for the year ended 31 December 2018 (continued)

1 Accounting policies (continued)

Derivative contracts

Derivative contracts are held at fair value. Gains or losses arising from changes in fair value are recognised in the profit and loss account within interest income or expenses in the period in which they arise.

Turnover

The Company provides unique expertise mainly to other Shell Group Companies to improve customers business performance. The Company develops and delivers applied technology solutions, by providing operational services, advice, support, project management, development and research. Turnover represents amounts receivable (excluding value added tax) for expenditure incurred in relation to research and development activities of the Company, which is recognised in income as incurred.

Royalty income is recognised as earned, this turnover relates to licence agreements issued on behalf of Shell Group companies, of which the Company retains up to 5%.

R&D expenditure credit

From 2013 onwards, the Company elected into the R&D expenditure credit regime in accordance with the relevant new tax legislation. The Company claims R&D expenditure credit receivable from HMRC that is equal to 11% of its qualifying R&D expenditure. The R&D credit is recognised as income within operating profit or loss before tax in the same year as the costs are expensed.

Government grants

Grants from the government are recognised at their fair value in profit or loss where there is a reasonable assurance that the grant will be received and the Company has complied with all attached conditions. Grants received where the Company has yet to comply with all attached conditions are recognised as a liability (and included in deferred income within trade and other payables) and released to income when all attached conditions have been complied with.

Provisions

Provisions are recognised when the Company has a present obligation (legal or constructive) as a result of a past event, it is probable that the Company will be required to settle that obligation and a reliable estimate can be made of the amount of the obligation.

Provisions are measured at the management's best estimate of the expenditure required to settle the obligation at the reporting date and are discounted to present value at a rate intended to reflect the time value of money where the effect of time value of money is material.

Shell Research Limited

Notes to the financial statements for the year ended 31 December 2018 (continued)

1 Accounting policies (continued)

Defined benefit pension obligation

Typically defined benefit plans define an amount of pension benefit that an employee will receive on retirement, usually dependent on one or more factors such as age, years of service and compensation.

The liability recognised in the balance sheet in respect of defined benefit pension plans is the present value of the defined benefit obligation at the reporting date minus the fair value of plan assets. The defined benefit obligation is measured using the projected unit credit method. The present value of the defined benefit obligation is determined by discounting the estimated future payments by reference to market yields at the reporting date on high-quality corporate bonds that are denominated in the currency in which the benefits will be paid, and that have terms to maturity approximating to the terms of the related pension liability.

Actuarial gains and losses are charged or credited to other comprehensive income in the period in which they arise.

Past-service costs are recognised immediately in profit or loss.

Netting off policy

Balances with other companies of the Shell Group are stated gross, unless both of the following conditions are met:

- Currently there is a legally enforceable right to set off the recognised amounts; and
- There is intent either to settle on a net basis, or to realise the asset and settle the liability simultaneously.

Research and Development

Development costs that are expected to generate future economic benefits are capitalised as intangible fixed assets. All other research and development expenditure is recognised in the profit and loss account as incurred.

2 Critical accounting judgements and key sources of estimation uncertainty

Estimates and judgements are continually evaluated and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances.

The Company makes estimates and assumptions concerning the future. The resulting accounting estimates will, by definition, seldom equal the related actual results. The estimates and assumptions that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are addressed below.

Shell Research Limited

Notes to the financial statements for the year ended 31 December 2018 (continued)

2 Critical accounting judgements and key sources of estimation uncertainty (continued)

Useful economic life of tangible fixed assets

Depreciation of tangible fixed assets is calculated using management's assessment of the useful economic lives of the underlying assets. Upon purchase or construction of an asset, useful economic life is assessed by reference to a number of underlying assumptions, including the economic lives of other similar assets. As the economic benefit of the assets is consumed over the course of its life, revisions to the useful life of the asset may be made upon assessment of changes in the operating environment or the condition of the asset itself.

Impairment of investments

Investments are tested for impairment whenever events or changes in circumstances indicate that the carrying amounts for those assets may not be recoverable. For the purposes of determining whether impairment of investments has occurred, and the extent of any impairment or its reversal, management review a range of measures relating to the underlying entity's performance, including the net present value of future cash flows. In assessing these measures, management make a number of assumptions relating (but not restricted) to future oil and gas prices, expected production volumes and refining margins appropriate to the local circumstances and environment. These assumptions and the judgements of management that are based on them are subject to change as new information becomes available. Changes in economic conditions can also affect the rate used to discount future cash flow estimates.

Group defined benefit pension scheme

Certain employees participate in a Group defined benefit pension scheme with other companies in the region. Under the terms of the scheme, there is no policy for allocating the net defined benefit obligation amongst the participating members.

The scheme is therefore accounted for as a defined contribution scheme, see note 14.

Provision for expected credit losses of trade debtors

The Company computes probability of default rates for third party trade debtors based on historical loss experience adjusted for current and forward looking information. At every reporting date, the historical observed default rates are updated and changes in the forward-looking estimates are analysed. For intra-group trade debtors, the Company uses an internal credit rating to determine the probability of default. Internal credit ratings are based on methodologies adopted by independent credit rating agencies.

Shell Research Limited

Notes to the financial statements for the year ended 31 December 2018 (continued)

3 Financial instruments

The Company has the following financial asset and liabilities measured at fair value through profit or loss:

	2018 £ 000	2017 £ 000
Derivative financial (liabilities)/assets	(3,310)	1,492

The derivative financial assets/(liabilities) are included in the amounts owed by/to fellow subsidiary undertakings.

The Company enters into derivative financial instruments to hedge its exposure to foreign currency exchange movements. Such transactions are carried out on commercial terms and conditions and at market rates.

At 31 December 2018, all the outstanding contracts will mature by 31 December 2019.

The Company has entered into forward exchange rate agreements to hedge the expected receipt of US Dollars, for a budgeted amount of GBP 72,742,000 (2017: GBP 79,555,000).

The forward foreign currency contracts are measured at fair value, which is determined using valuation techniques that utilise observable inputs and are accounted through profit and loss account.

Derivative instruments as at 31 December 2018

Derivative financial liabilities

	Fair value- current assets and liabilities £ 000	Change in value in profit and loss account £ 000
Forward currency contracts	(3,310)	(3,310)
Total	(3,310)	(3,310)

Shell Research Limited

Notes to the financial statements for the year ended 31 December 2018 (continued)

3 Financial instruments (continued)

Derivative instruments as at 31 December 2017

Derivative financial assets

	Fair value- current assets and liabilities £ 000	Change in value in profit and loss account £ 000
Forward currency contracts	1,492	1,492
Total	1,492	1,492

4 Turnover

The analysis of the Company's turnover for the year by market is as follows:

	2018 £ 000	2017 £ 000
Europe	155,394	172,299
Other Eastern hemisphere	618	363
Western hemisphere	786	71
	156,798	172,733

Class of business	2018 £ 000	2017 £ 000
Net Royalty	129	331
Operating Income	156,669	172,402
	156,798	172,733

Shell Research Limited

Notes to the financial statements for the year ended 31 December 2018 (continued)

5 Interest receivable and similar income

	2018	2017
	£ 000	£ 000
Interest from Group undertakings:		
Fellow subsidiary undertakings	<u>163</u>	<u>52</u>
	<u>163</u>	<u>52</u>

6 Operating profit

Arrived at after charging/(crediting):

	2018	2017
	£ 000	£ 000
Currency translation:		
Trading activities	3,834	(3,772)
Depreciation:		
On owned assets	16	41
Research and development cost	11,032	10,385
Provision for doubtful debts	247	60

7 Staff costs

The aggregate payroll costs were as follows:

	2018	2017
	£ 000	£ 000
Wages and salaries	60,910	66,544
Social security costs	8,802	9,105
Pension costs (note 14)	6,673	7,399
Redundancy provision charge	<u>732</u>	<u>11,554</u>
	<u>77,117</u>	<u>94,602</u>

Shell Research Limited

Notes to the financial statements for the year ended 31 December 2018 (continued)

7 Staff costs (continued)

The average number of persons employed by the Company (including Directors) during the year, analysed by category was as follows:

	2018 No.	2017 No.
Research and development	<u>420</u>	<u>455</u>

The Company does not directly employ staff, all employment contracts are held with Shell International Petroleum Company Limited. Staff costs are 100% recharged from Shell International Petroleum Company Limited through Shell International Limited.

8 Auditor's remuneration

The auditor's remuneration of £4,000 (2017: £9,000) in respect of the statutory audit was borne by the Company for both the current and preceding years.

Fees paid to the Company's auditor and its associates for non-audit services to the Company itself are not disclosed in the individual accounts of the Company because the Royal Dutch Shell plc consolidated accounts are required to disclose such fees on a consolidated basis.

Shell Research Limited

Notes to the financial statements for the year ended 31 December 2018 (continued)

9 Tax on result

Tax charge in the profit and loss account

The tax charge for the year of £1,124,000 (2017: £1,356,000) is made up as follows:

	2018 £ 000	2017 £ 000
Current taxation		
UK corporation tax	596	1,333
UK corporation tax adjustment to prior periods	490	(18)
Double taxation relief	-	(391)
Foreign tax	-	391
Total current tax charge	1,086	1,315
Deferred taxation		
Arising from origination and reversal of temporary differences	38	41
Total deferred tax charge	38	41
Tax charge in the profit and loss account	1,124	1,356

Shell Research Limited

Notes to the financial statements for the year ended 31 December 2018 (continued)

9 Tax on result (continued)

Reconciliation of total tax charge

The tax on loss before tax for the year differs from the standard rate of corporation tax in the UK of 19% (2017: 19.25%).

The differences are reconciled below:

	2018 £ 000	2017 £ 000
Loss/(profit) before tax	1,696	(1,620)
Tax on loss/(profit) calculated at standard rate (2018- 19.00%) (2017- 19.25%)	(322)	312
Effects of:		
Expenses not deductible	960	1,067
Adjustments in respect of prior periods	490	(18)
Change in corporation tax rates	(4)	(5)
Tax imposed outside the UK	-	391
Double taxation relief	-	(391)
Total tax charge	<u>1,124</u>	<u>1,356</u>

UK Finance Act (No 2) Act 2015 which introduced reductions in the UK corporation tax rate to 19% effective from 1 April 2017 and to 18% effective from 1 April 2020 was enacted on 15 November 2015.

UK Finance Act 2016 which introduced further reductions in the UK corporation tax rate to 17% effective 1 April 2020 was enacted on 15 September 2016.

Deferred tax assets as at:

	2018 £ 000	2017 £ 000
Temporary difference in respect of capital allowances	251	289
Other items	3	3
	<u>254</u>	<u>292</u>

Shell Research Limited

Notes to the financial statements for the year ended 31 December 2018 (continued)

9 Tax on result (continued)

	At 1 January 2018 £ 000	Recognised in Profit and loss account £ 000	At 31 December 2018 £ 000
Deferred tax movement during the year			
Temporary difference in respect of capital allowances	289	(38)	251
Other items	<u>3</u>	<u>-</u>	<u>3</u>
Net tax assets	<u><u>292</u></u>	<u><u>(38)</u></u>	<u><u>254</u></u>

	At 1 January 2017 £ 000	Recognised in Profit and loss account £ 000	At 31 December 2017 £ 000
Deferred tax movement during the year			
Temporary difference in respect of capital allowances	330	(41)	289
Other items	<u>3</u>	<u>-</u>	<u>3</u>
Net tax assets	<u><u>333</u></u>	<u><u>(41)</u></u>	<u><u>292</u></u>

Shell Research Limited

Notes to the financial statements for the year ended 31 December 2018 (continued)

10 Tangible assets

	Plant and machinery £ 000	Office furniture and fittings £ 000	Total £ 000
Cost or valuation			
Balance at 1 January 2018	34	143	177
Balance at 31 December 2018	<u>34</u>	<u>143</u>	<u>177</u>
Accumulated Depreciation			
Balance at 1 January 2018	(8)	(119)	(127)
Charge for the year	<u>(2)</u>	<u>(14)</u>	<u>(16)</u>
Balance at 31 December 2018	<u>(10)</u>	<u>(133)</u>	<u>(143)</u>
Net book amount			
At 31 December 2018	<u>24</u>	<u>10</u>	<u>34</u>
At 31 December 2017	<u>26</u>	<u>24</u>	<u>50</u>

Shell Research Limited

Notes to the financial statements for the year ended 31 December 2018 (continued)

11 Investments

	Total £ 000
Cost	
Balance at 1 January 2018	26,194
Additions	<u>2,185</u>
Balance at 31 December 2018	<u>28,379</u>
Amounts provided	
Balance at 1 January 2018	(26,194)
Additions	<u>(2,185)</u>
Balance at 31 December 2018	<u>(28,379)</u>
Carrying amount	
At 31 December 2018	<u><u>-</u></u>
At 31 December 2017	<u><u>-</u></u>

In 2008 the Company entered into an agreement to fund the operations of a new entity (Limited Liability Partnership), Energy Technologies Institute LLP ("ETI"). The Company is committed to contribute up to GBP 5 million each year, with the amount contributed in a financial year being agreed each year by the Members. The Directors believe that the Company does not control or have significant influence over ETI. During the period the Company invested GBP 2,185,000. Full impairment has been recorded against the investment as it is yet to demonstrate long term value to the Company.

Shell Research Limited

Notes to the financial statements for the year ended 31 December 2018 (continued)

12 Trade and other debtors

Debtors: amounts due within one year

	2018 £ 000	2017 £ 000
Trade debtors	680	783
Amounts owed by Group undertakings:		
Fellow subsidiary undertakings	38,423	45,577
Amounts owed by participating undertakings	382	412
Prepayments and accrued income	691	193
Other debtors	5,136	5,974
	<u>45,312</u>	<u>52,939</u>

Amounts owed by Group undertakings are unsecured and interest free except for balances with Shell Treasury Centre Limited amounting to GBP 38,205,000 (2017: GBP 41,344,000) at a weighted average interest ranging from 0.00% to 2.53% (2017: 0.05% to 1.07%) repayable on demand.

Included in other debtors is research and development credit of GBP 4,258,000 receivable from HM Revenue & Customs (2017: GBP 4,880,000) and VAT receivable of GBP 878,000 (2017: GBP 1,094,000)

The Company has recorded all financial assets at amortised cost.

Shell Research Limited

Notes to the financial statements for the year ended 31 December 2018 (continued)

13 Creditors: amounts falling due within one year

	2018 £ 000	2017 £ 000
Trade creditors	5,661	7,772
Amounts owed to Group undertakings		
Fellow subsidiary undertakings	5,061	1,519
Tax liability	3,397	4,414
Accrued expenses	12,679	12,156
	<u>26,798</u>	<u>25,861</u>

Amounts owed to Group undertakings are unsecured, interest free, have no fixed date of repayment and are repayable on demand.

The Company has recorded all financial liabilities at amortised cost.

14 Pension and other schemes

The Company is a Member Company of the Shell Contributory Pension Fund ("SCPF"), a defined benefits pension scheme, which provides pensions and other post-retirement benefit entitlements to eligible United Kingdom employees. Apart from the contributions from employee members, which have a fixed maximum rate, the SCPF is funded entirely by contributions from Member Companies at rates certified from time to time by Aon Hewitt Limited, the SCPF's actuary. On 1 March 2013, the SCPF was closed to new entrants. At the same time, the Shell Group established the UK Shell Pension Plan ("UKSPP"), a defined contribution scheme, to provide benefits to new employees.

Aon Hewitt Limited carried out the triennial actuarial valuation of the SCPF as at 31 December 2017 using the projected unit method. The value of the SCPF's assets taken into account for the funding valuation at that date was £16,322 million and the value of the liabilities was £15,169 million. The principal financial assumptions adopted in the valuation were: a discount rate determined with reference to the UK Government Fixed Interest yield curve plus 1.25%; a price inflation rate being the difference between the UK Government Fixed Interest yield and the UK Government Index-Linked yield curves; and a rate of general salary increases fixed at 3.1% per annum. The funding surplus (excess of assets compared to the value of pension liabilities) was £1,153 million. This corresponded to a funding ratio (assets as a percentage of liabilities) of 108%.

Shell Research Limited

Notes to the financial statements for the year ended 31 December 2018 (continued)

14 Pension and other schemes (continued)

A valuation was performed for accounting purposes at 31 December 2018 using assumptions set in line with the requirements of the IAS19 accounting standard. The principal financial assumptions adopted in the valuation were a discount rate of 2.90%, a rate of general salary increases of 3.10% for 2019 onwards, and a price inflation rate of 3.22%. The value of the SCPF's assets as at that date was £15,755 million and the value of the liabilities on this accounting basis was £14,029 million, meaning the surplus measured for accounting purposes was £1,726 million.

The plan assets of the scheme were invested mainly in quoted equities (26%) and debt instruments (51%), with the remainder (23%) invested across a variety of asset classes including real estate, private equity and other investment funds.

The Company is unable to identify its share of the scheme's underlying assets and liabilities on a consistent and reasonable basis to enable it to account for the plan as a defined benefit plan. There are no contractual or stated policies on which to base an allocation of the Fund's underlying assets and liabilities to member companies. Accordingly, the Company will continue to account for the SCPF as a defined contribution scheme.

The Company's contributions to the SCPF for the year amounted to £4,535,115 (2017: £5,103,336). As a result of changes enacted to the funding of the SCPF during 2014, Company contributions are held in a Contribution Reserve Account ("CRA") to which the SCPF Trustee will have access under certain circumstances. Contributions remained at 20% for 2018, and will reduce to 10% from 1 January 2019.

The cost of contributions to the UKSPP for the year amounts to £1,626,309 (2017: £1,891,996).

15 Provisions

	Redundancy £ 000
Balance as at 1 January 2018	9,087
Increase in existing provisions	732
Provisions used	<u>(6,530)</u>
Balance as at 31 December 2018	<u>3,289</u>

Shell Research Limited

Notes to the financial statements for the year ended 31 December 2018 (continued)

16 Called up share capital

Allotted, called up and fully paid shares

	No.	2018 £ 000	No.	2017 £ 000
Issued share capital of £1 each	<u>50,000</u>	<u>50</u>	<u>50,000</u>	<u>50</u>

17 Directors' emoluments

The Directors' emoluments for the year were as follows:

	2018 £ 000	2017 £ 000
Emoluments	<u>1,064</u>	<u>1,270</u>

The number of Directors who were receiving retirement benefits as at 31 December 2018 are as follows:

	2018 No.	2017 No.
Shares receivable by Directors	5	4
Accruing benefits under defined benefit pension scheme	<u>4</u>	<u>3</u>

In respect of the highest paid Director:

	2018 £ 000	2017 £ 000
Emoluments	310	651
Defined benefit accrued pension entitlement at the end of the period	101	-

During the year the highest paid Director received or was entitled to receive shares under a long term incentive scheme.

These emoluments and pensions are recharged to the Company from Shell International Petroleum Company Ltd and are then charged to other Group companies.

18 Contingent liabilities

A contingent liability of GBP 1.2 mln exists in relation to withholding tax deducted from historical royalty income. This exposure has arisen following the conclusion that Shell Research Limited is not the beneficial owner of the proportion of royalty income that it receives and then pays to Shell Global Solutions International B.V.

Shell Research Limited

Notes to the financial statements for the year ended 31 December 2018 (continued)

19 Related party transactions

The details of related party transactions that occurred during the year and the year end balance outstanding are as follows:

Related party name	Receivable balance as at		Transactions during the year	
	2018 £ 000	2017 £ 000	2018 £ 000	2017 £ 000
Infineum International Limited	382	264	2,876	1,808
Shell Malaysia Sendirian Berhad	-	-	(4)	-
British Pipeline Agency Limited	-	30	120	301
Brunei Shell Petroleum Company Sendirian Berhad	-	117	178	117
Eastham Refinery Limited	-	-	-	29