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REPORTER

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UNIVERSITY OF CAMBRIDGE

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NOTICES

Calendar

19 December, *Tuesday*. Michaelmas Term ends.

25 December, *Monday*. Christmas Day. Scarlet Day.

5 January, *Friday*. Lent Term begins.

10 January, *Wednesday*. First ordinary number of the *Reporter* in Lent Term.

16 January, *Tuesday*. Full Term begins.

Discussion on Tuesday, 23 January 2018

The Vice-Chancellor invites those qualified under the regulations for Discussions (*Statutes and Ordinances*, p. 105), to attend a Discussion in the Senate-House on Tuesday, 23 January 2018 at 2 p.m., for the discussion of:

1. Joint Report of the Council and the General Board, dated 5 December 2017 and 29 November 2017, on the definition of student used in certain procedures applicable to students and in committee membership (*Reporter*, 6487, 2017–18, p. 164).

2. Report of the General Board, dated 29 November 2017, on the establishment and re-establishment of certain Professorships (*Reporter*, 6487, 2017–18, p. 168).

3. Joint Report of the Council and the General Board, dated 11 December 2017 and 29 November 2017, on the governance of the Careers Service (p. 179).

Further information on Discussions, including details on format and attendance, is provided at https://www.governance.cam.ac.uk/governance/decision-making/discussions/.

Election to the Council

8 December 2017

The Vice-Chancellor announces that the following candidate has been nominated in accordance with Statute A IV 2 for election to the Council in class (*a*) (Heads of Colleges), and that it has been certified to him that the candidate has consented to be nominated:

Candidate:	*Nominated by*:
Rev'd Dr Jeremy Morris, Master of Trinity Hall	Professor M. R. E. Proctor, Provost of King's College, and Professor R. V. Penty, Master of Sidney Sussex College

No other persons having been nominated, Dr Morris is duly elected in class (*a*), to serve from 1 January 2018 for one year.

Election of a member of the Council's Finance Committee in class (*b*)

8 December 2017

A vacancy will arise on the Council's Finance Committee for a member of the Regent House, elected by representatives of the Colleges, to serve for three years from 1 January 2018.

The election is conducted in accordance with the Single Transferable Vote regulations. Voting is by postal ballot.

Nominations should be made in writing to the Head of the Registrary's Office, University Offices, The Old Schools, Cambridge, CB2 1TN, and must include a statement by the person nominated that he or she is willing to serve on the Finance Committee. Nominations and statements should be made by **12 noon on Tuesday, 2 January 2018**. Nominations should be supported by the signatures of two members of the Regent House.

If a ballot is necessary, papers will be dispatched by Thursday, 4 January 2018, for return by 12 noon on Monday, 15 January 2018.

Cambridge Centre for Crop Science

11 December 2017

The Cambridge Centre for Crop Science is a joint research initiative led by the University and the National Institute of Agricultural Botany (NIAB). Funding of £16.928m towards the capital costs of a new University laboratory building and plant growth facilities, to be constructed on NIAB operational sites in Cambridge and at Park Farm, Histon, has been awarded from HEFCE's UK Research Partnership Investment Fund 2018–20.

The facilities will be leased to the University for a period of 60 years and will therefore constitute a University building for the period of the lease. Approval for implementation of the project will be sought by Grace of the Regent House in Easter Term 2018, subject to approval of the Full Case by the Planning and Resources Committee. A Concept Case was approved by the Committee on 11 October 2017.

The University facilities will be established as part of a wider programme of refurbishment and development across the two sites. That programme is led by NIAB, which has accordingly made planning applications to Cambridge City and South Cambridgeshire District Councils.

Project and Programme Governance Guidelines for information technology and services

The Information Services Committee draws the attention of the University to its Project and Programme Governance Guidelines which provide a framework for the oversight of projects in information technology and services. Projects falling within that definition and within the purview of the Information Services Committee will only be progressed within that framework.

The Information Services Committee considers that the governance arrangements and procedures set out in the Guidelines are of wider application and commends the framework for projects more generally. The Guidelines are therefore brought to the attention of the University and include a schedule of documents that, together, form the framework which supports:

(*i*) the consideration and making of investment decisions;
(*ii*) monitoring the progress of projects and programmes;
(*iii*) final sign-off of projects and programmes once they have delivered against agreed objectives; and
(*iv*) the post-project review.

The Guidelines have therefore been published on the Information Services Committee's site on the University governance hub at: https://www.governance.cam.ac.uk/committees/information-services/.

VACANCIES, APPOINTMENTS, ETC.

Vacancies in the University

A full list of current vacancies can be found at http://www.jobs.cam.ac.uk.

Director of MRC Cognition and Brain Sciences Unit and Professor of Cognitive Brain Sciences in the Department of Psychiatry; salary: competitive; closing date: 14 January 2018; informal enquiries: contact Mr Roger Russell, Executive Director, Penna Executive Search Agency (email: Roger.Russell@Penna.com): further details: http://www.jobs.cam.ac.uk/job/16060; quote reference: RN14273

Director of Information Services in the University Information Services; closing date: 5 January 2018; further details: http://www.jobs.cam.ac.uk/job/16062; quote reference: VC14275

University Lecturer or University Senior Lecturer in the Department of Haematology; salary: £39,992–£50,618 for a Lecturer or £53,691–£56,950 for a Senior Lecturer; closing date: 18 January 2018; further details: http://www.jobs.cam.ac.uk/job/15646; quote reference: RB13918

Clinical Lecturer in Experimental Medicine: Respiratory Medicine (fixed-term) in the Department of Medicine; salary: £32,478–£57,444; tenure: four years; closing date: 2 January 2018; further details: http://www.jobs.cam.ac.uk/job/15991; quote reference: RC14217

Strategic Financial Planning Manager in the Finance Division; salary: £53,691–£56,950; closing date: 3 January 2018; further details: http://www.jobs.cam.ac.uk/job/16009; quote reference: AG14228

Senior Category Manager (Indirects) in the Finance Division; salary: £35,550–£47,722; closing date: 2 January 2018; further details: http://www.jobs.cam.ac.uk/job/15865; quote reference: AG14106

The University values diversity and is committed to equality of opportunity.

The University has a responsibility to ensure that all employees are eligible to live and work in the UK.

Appointment and grants of title

The following appointment and grants of title have been made:

APPOINTMENT

Assistant Treasurer

University Offices (*Finance Division*). Ms Bernadette Anne Parsons appointed from 6 November 2017 until the retiring age.

GRANTS OF TITLE

Affiliated Lecturers

Clinical Medicine. Dr Pradeep J. Nathan, *W*, has been granted the title of Affiliated Lecturer from 1 August 2017 for a further two years.

Divinity. Dr Matthew James Bullimore has been granted the title of Affiliated Lecturer from 1 October 2017 until 30 September 2019.

Economics. Professor Coenraad Nicolaas Teulings, *CAI*, has been granted the title of Affiliated Lecturer from 1 January 2018 until 30 September 2019.

Education. Professor Anna Middleton has been granted the title of Affiliated Lecturer from 1 December 2017 until 30 November 2019.

Human, *Social*, *and Political Science*. Dr Ingrida Kerusauskaite and Dr Riall W. Nolan have been granted the title of Affiliated Lecturer from 1 October 2017 until 30 September 2019. Dr Flavio Vasconcellos Comim, *ED*, Dr Batoul Roxanne Farmanfarmaian, Dr Kseniya Gerasimova, *DAR*, Mr Javier Gonzalez Diaz, Dr Solava Ibrahim, Dr Nitya Mohan Khemka, Dr Frank G. Madsen, Dr Claudia Isabel Marques de Abreu Lopes, Dr Jaqueline Gay Meeks, *R*, Professor Chizu Nakjima, Mr Richard Sidebottom, Dr Maryam Tanwir, Dr Sylvana Palma Tomaselli, *JN*, and Dr Robert Douglas Wetherley have been granted the title of Affiliated Lecturer from 1 October 2017 for a further two years.

NOTICES BY THE GENERAL BOARD

Senior Academic Promotions, 1 October 2018 exercise: Committees

Further to the notice published on 22 November 2017 (*Reporter*, 6485, 2017–18, p. 118), the following appointments have now been confirmed:

Appointed to the General Board's Senior Academic Promotions Committee:
Professor Jeremy Keith Morris Sanders (Technology).

Appointed to the General Board's Sub-Committee for the Physical Sciences:
Professor Paul Kingsley Townsend.

REGULATIONS FOR EXAMINATIONS

Computer Science Tripos, Part IA

(*Statutes and Ordinances*, p. 302)

With immediate effect

The General Board, on the recommendation of the Faculty Board of Computer Science and Technology, has approved an amendment to the regulations for the Computer Science Tripos so as to acknowledge that papers from the Psychological and Behavioural Sciences Tripos are no longer available to candidates taking Part IA of the Computer Science Tripos.

Regulation 10(*b*) (iii).

By removing the following words:

> *either* Introduction to Psychology (Paper PBS 1 of Part IA of the Psychological and Behavioural Sciences Tripos) *or*

Examination in Interdisciplinary Design for the Built Environment for the M.St. Degree: Correction

The Notice published on 1 February 2017 (*Reporter*, 6453, 2016–17, p. 343) confirming regulation changes for the examination in Interdisciplinary Design for the Built Environment for the degree of Master of Studies contained a typographical error. The regulation changes approved by the General Board were effective from 1 October 2017 and not 1 October 2018 as stated. The 2017 edition of *Statutes and Ordinances* has been corrected accordingly.

NOTICES BY FACULTY BOARDS, ETC.

Examination in Bioscience Enterprise for the M.Phil. Degree, 2017–18

Further to the Notice published on 26 July 2017 (*Reporter*, 6475, 2016–17, p. 788), the Degree Committee for the Faculty of Engineering gives notice that the following amendment has been made to the modules offered in 2017–18 for the examination in Bioscience Enterprise for the degree of Master of Philosophy.

The module ‘Management of technology and innovation’ has been replaced with the module ‘Management and entrepreneurship’. The references and mode of assessment remain the same.

The Degree Committee confirms that no candidate’s preparation for the examination will be affected by these changes.

Examination in Energy Technologies for the M.Phil. Degree, 2017–18

Further to the Notice published on 26 July 2017 (*Reporter*, 6475, 2016–17, p. 789), the Degree Committee for the Faculty of Engineering gives notice that the following amendments have been made to the modules offered in 2017–18 for the examination in Energy Technologies for the degree of Master of Philosophy.

In addition to those previously notified, the following modules will now be offered as Electives in the academical year 2017–18:

Reference	*Name*	*Mode of assessment*
4A15	Aeroacoustics	Examination
4C7	Random and non-linear vibrations	Coursework and examination
4M12	Partial differential equations and variational methods	Examination

The Degree Committee confirms that no candidate’s preparation for the examination will be affected by these changes.

Examination in Engineering for Sustainable Development for the M.Phil. Degree, 2017–18

Further to the Notice published on 26 July 2017 (*Reporter*, 6475, 2016–17, p. 790), the Degree Committee for the Faculty of Engineering gives notice that the following amendments have been made to the modules offered in 2017–18 for the examination in Engineering for Sustainable Development for the degree of Master of Philosophy.

The module ‘Management of technology and innovation’ (Reference: MOT&I) has been replaced with the module ‘Management and entrepreneurship’ (Reference: MAE).

In addition to those previously notified, the following module will now be offered as an Elective in the academical year 2017–18, with the teaching taking place in the Michaelmas Term:

Reference	*Name*	*Mode of assessment*
EP08	Comparative environmental politics and policy	Coursework

In addition to those previously notified, the following modules will now be offered as Electives in the academical year 2017–18, with the teaching taking place in the Lent Term:

Reference	*Name*	*Mode of assessment*
4D4	Construction engineering	Coursework
EP06	Energy and climate change	Examination [two hours]

The following modules will **no longer** be offered:

Reference	*Name*
4D16	Construction engineering
TPE5	Policy, design, and evaluation
EP10	Climate change policy and land development

The Degree Committee confirms that no candidate’s preparation for the examination will be affected by these changes.

Examination in Industrial Systems, Manufacture, and Management for the M.Phil. Degree, 2017–18

Further to the Notice published on 26 July 2017 (*Reporter*, 6475, 2016–17, p. 791), the Degree Committee for the Faculty of Engineering gives notice that the following amendments have been made to the modules offered in 2017–18 for the examination in Industrial Systems, Manufacture, and Management for the degree of Master of Philosophy.

The list of projects is now as follows:

Reference	*Name*	*Mode of assessment*
PR1	Industrial project 1	Coursework
PR2	Industrial project 2	Coursework
PR3	Enterprise project	Coursework
PR4	Industrial project 3	Coursework
PR5	Combined essay	Coursework

The Degree Committee confirms that no candidate's preparation for the examination will be affected by these changes.

Examination in Nuclear Energy for the M.Phil. Degree, 2017–18

Further to the Notice published on 26 July 2017 (*Reporter*, 6475, 2016–17, p. 793), the Degree Committee for the Faculty of Engineering gives notice that the following amendments have been made to the modules offered in 2017–18 for the examination in Nuclear Energy for the degree of Master of Philosophy.

In addition to those previously notified, the following modules will now be offered as Electives in the academical year 2017–18:

Reference	*Name*	*Mode of assessment*
4I7	Electricity and environment	Coursework
4M18	Present and future energy systems	Examination
TP5	Policy design and evaluation	Coursework
TPE20	Management of the innovation process	Coursework
TPE21	Entrepreneurial science and innovation policy	Coursework
TPE23	Negotiation skills	Coursework
TPE24	Platform strategy	Coursework
TPE25	Strategic valuation uncertainty and real options in system design	Coursework
ESD150	Driving change towards sustainability	Coursework
B6	Fluid mechanics and the environment	Examination

The Degree Committee confirms that no candidate's preparation for the examination will be affected by these changes.

Examination in Future Infrastructure and Built Environment for the M.Res. Degree, 2017–18

Further to the Notice published on 26 July 2017 (*Reporter*, 6475, 2016–17, p. 794), the Degree Committee for the Faculty of Engineering gives notice that the following amendments have been made to the modules offered in 2017–18 for the examination in Future Infrastructure and Built Environment for the degree of Master of Research.

In addition to those previously notified, the following modules will now be offered as Electives in the academical year 2017–18:

Reference	*Name*	*Mode of assessment*
4D6	Dynamics in civil engineering	Coursework and examination
4M20	Robotics	Coursework
5R7	Advanced numerical methods in geomechanics	Coursework

The Degree Committee confirms that no candidate's preparation for the examination will be affected by these changes.

Examination in Integrated Photonic and Electronic Systems for the M.Res. Degree, 2017–18

Further to the Notice published on 26 July 2017 (*Reporter*, 6475, 2016–17, p. 796), the Degree Committee for the Faculty of Engineering gives notice that the following amendments have been made to the modules offered in 2017–18 for the examination in Integrated Photonic and Electronic Systems for the degree of Master of Research.

The subsection 'Biophysics' has been replaced with 'Fundamentals' and now comprises the following modules, all of which were announced in the previous notice:

Reference	*Name*	*Mode of assessment*
UCLAPD	Advanced photonic systems	Examination
4G2	Biosensors	Coursework
UCLBTC	Broadband technologies and components	Examination
4B11	Photonic systems	Examination
UCLPON	Physics and optics of nanostructures	Coursework and examination

The subsection 'Photonic systems' has been replaced with 'Systems' and now comprises the modules below (all of which were announced previously). Modules marked with an asterisk (*) are now only available under this subsection and are no longer available as Electives.

Reference	*Name*	*Mode of assessment*
4B23*	Optical fibre communication	Coursework and examination
UCLOTN*	Optical transmission networks	Examination
UCLPSS	Photonic sub-systems	Examination
4B24*	Radio frequency systems	Coursework and examination

The composition of the 'Business' subsection remains unchanged, but is now called 'Business skills'.

The module 'Software for network devices' (UCLSNS) is now titled 'Software for network services and design' (the module references remain unchanged).

The module 'RF circuits and sub-systems' (UCLRCS) is now titled 'RF circuits and devices' (UCLRCD).

The following modules will **not** be available for examination in 2017–18:

Reference	*Name*
4B5	Nanotechnology
4F2	Robust and nonlinear systems and control
4F5	Advanced communications and coding
4F7	Digital filters and spectrum estimation
UCLPON	Physics and optics of nano-structure

The Degree Committee confirms that no candidate's preparation for the examination will be affected by these changes.

Examination in Sensor Technologies and Applications for the M.Res. Degree, 2017–18

Further to the Notice published on 26 July 2017 (*Reporter*, 6475, 2016–17, p. 797), the Degree Committee for the Faculty of Engineering gives notice that the following amendments have been made to the modules offered in 2017–18 for the examination in Sensor Technologies and Applications for the degree of Master of Research.

In addition to those previously notified, the following modules will now be offered as Electives in the academical year 2017–18:

Reference	*Name*	*Mode of assessment*
BIOPR	Biological physics (principles)	Examination
BIOTE	Biological physics (techniques)	Examination
4B25	Embedded systems for the Internet of Things	Coursework
4F12	Computer vision	Examination
4F13	Probabilistic machine learning	Coursework
4I8	Medical physics	Examination

The above modules supersede the module 'Biological Physics' (2/BIO), which will therefore not be available for examination.

The Degree Committee confirms that no candidate's preparation for the examination will be affected by these changes

REPORTS

Joint Report of the Council and the General Board on the governance of the Careers Service

The Council and the General Board beg leave to report to the University as follows:

1. In November 2016, the Council agreed to conduct a review of the Careers Service. A report setting out the conclusions of the Review Committee was received by the General Board and the Council in July 2017. The Review made nine recommendations, which were broadly welcomed by the Council and the General Board. These included a recommendation proposing changes to the arrangements for oversight of the Service. This Report makes recommendations for the implementation of revised governance arrangements, which are in alignment with the Review Committee's objectives and findings.

2. The Council and the General Board endorse the Review Committee's recommendation that the governance of the Careers Service should be amended, and agree with the proposals to establish an executive body responsible to the General Board and Council, supported by an advisory body. This recommendation is also supported by the Chair of the Careers Service Syndicate and the Director of the Careers Service.

3. The Council considers that the Careers Service should have direct accountability to the General Board and Council, given (i) its highly significant role in supporting students, postdoctoral researchers, and alumni, and (ii) the increasing focus on career destinations and employability as a Key Performance Indicator for the University, for example, in securing Research Council funding and as part of the assessment for an award in the Teaching Excellence Framework.

4. The Council further considers that the Director of the Careers Service should be assisted in her or his duties through improved integration into the strategic and financial planning processes of the University.

5. The Council and the General Board propose that a new Careers Service Committee is established as the executive body providing greater accountability, and that the Syndicate, which already provides a forum for the Service's stakeholders, becomes the advisory body.

6. Other recommendations of the Review will be taken forward separately, under the supervision of the General Board and its Education Committee.

7. The Council and the General Board recommend:

I. That a Careers Service Committee be created, reporting jointly to the Council and the General Board, and that regulations for the Careers Service Committee, as set out in Annex A to this Report, be approved.

II. That the revised regulations for the Careers Service Syndicate, as set out in Annex B to this Report, be approved.

11 December 2017	Stephen Toope, *Vice-Chancellor*	Alice Hutchings	Michael Proctor
	Richard Anthony	Darshana Joshi	Philippa Rogerson
	Daisy Eyre	Fiona Karet	John Shakeshaft
	Anthony Freeling	Umang Khandelwal	Susan Smith
	Nicholas Gay	Stuart Laing	Sara Weller
	David Greenaway	Mark Lewisohn	Mark Wormald
	Nicholas Holmes	Susan Oosthuizen	Jocelyn Wyburd

29 November 2017	Stephen Toope, *Vice-Chancellor*	Darshana Joshi	Helen Thompson
	Philip Allmendinger	Martha Krish	Graham Virgo
	Abigail Fowden	Martin Millett	Mark Wormald
	David Good	Richard Prager	
	A. L. Greer	Susan Rankin	

ANNEX A – Careers Service Committee Terms of Reference

CAREERS SERVICE COMMITTEE

1. There shall be a Careers Service Committee of the Council and the General Board which shall be responsible for the administration of the Careers Service.

2. The Committee shall consist of:

(*a*) the Pro-Vice-Chancellor (Education) as Chair;
(*b*) two members of the Careers Service Syndicate appointed by the Council;
(*c*) a member appointed by the General Board from among its members;
(*d*) a member appointed by the Senior Tutors' Committee from among its members;
(*e*) a member appointed by the Graduate Tutors' Committee from among its members;
(*f*) a member appointed by the Committee on the nomination of the Postdocs of Cambridge Society;
(*g*) a member of the University *in statu pupillari*[1] or an elected officer of Cambridge University Students' Union, appointed by the Committee on the nomination of Cambridge University Students' Union;
(*h*) a member of the University *in statu pupillari*[1] or an elected officer of the Graduate Union, appointed by the Committee on the nomination of the Graduate Union;
(*i*) no more than three persons co-opted by the Committee.

3. Members in class (*b*) shall serve for a period concurrent with their appointment to the Careers Service Syndicate and shall cease to be members of the Committee on ceasing to be members of the Syndicate. Members in classes (*c*), (*d*), and (*e*) shall be appointed in the Michaelmas Term for four years from 1 January following their appointment. Members in class (*f*) shall be appointed in the Michaelmas Term for three years from 1 January following their appointment. Members in classes (*g*) and (*h*) shall be appointed in the Michaelmas Term for the remainder of that academical year. Members in class (*i*) shall be appointed for such period as the Committee shall determine.

4. The Chair and five other members shall constitute a quorum of the Committee.

5. The Director of the Careers Service shall act as Secretary of the Committee.

6. It shall be the duty of the Committee:

(*a*) to oversee delivery of the long-term strategy for the Careers Service, as determined by the General Board;
(*b*) to manage resources available to progress overall strategy;
(*c*) to oversee the operation of the Careers Service;
(*d*) to consult as necessary with other parts of the University engaged in supporting and developing students and postdoctoral researchers, to ensure appropriateness and continuous improvement of service;
(*e*) to make an Annual Report to the General Board and the Council, and provide such other reports as may be required from time to time.

7. The Committee shall meet at least once each term.

8. The Committee, or a subset thereof, shall form the Appointments Committee responsible for appointment of the Director of the Careers Service, and for other such appointments in the Careers Service as the Committee may decide. For the appointment or reappointment of the Director of the Careers Service, the Registrary, or a duly appointed deputy, shall act as Secretary to the Appointments Committee. For any other appointment, the Director of the Careers Service, or a duly appointed deputy, shall act as Secretary to the Appointments Committee.

9. The provisions of Special Ordinance A (vii) 5 concerning reserved business shall apply to the Committee as if it were a body constituted by Statute.

Staff of the Careers Service

1. There shall be the University office of Director of the Careers Service and such number of University offices of Careers Adviser as may be determined from time to time by the Council on the recommendation of the Careers Service Committee. The Director shall act as Secretary of the Careers Service Committee. The Director may designate one of the Careers Advisers as Deputy Director of the Careers Service.

2. The Director and any other University officer on the staff of the Careers Service shall be resident in the University during term and for four weeks in the Long Vacation.

[[1] References to members of the University *in statu pupillari* will be updated to reference registered students if the recommendations of the Joint Report of the Council and the General Board on the definition of student used in certain procedures applicable to students and in committee membership (see *Reporter*, 6487, 2017–18, p. 164) are approved.]

ANNEX B – Revised Regulations for the Careers Service Syndicate

CAREERS SERVICE SYNDICATE

1. There shall be a Careers Service Syndicate which shall consist of:
(*a*) the Vice-Chancellor (or a duly appointed deputy) as Chair;
(*b*) four members of the Regent House appointed by the Council;
(*c*) twelve members of the Regent House nominated by the Colleges, in sequential rotation;
(*d*) the members of the Careers Service Committee in classes (*f*), (*g*), and (*h*);
(*e*) not more than twelve persons co-opted by the Syndicate, to include members of employer organizations and the postdoctoral community.

Members in class (*b*) shall be appointed in the Michaelmas Term to serve for four years from 1 January following their appointment. Members in class (*c*) shall be appointed in the Michaelmas Term to serve for three years from 1 January following their appointment, four being appointed each year. The order of rotation of Colleges for the nomination of members in class (*c*) shall be as follows:

Christ's College, Churchill College, Clare Hall, Clare College, Corpus Christi College, Lucy Cavendish College, Downing College, Emmanuel College, Darwin College, Fitzwilliam College, Gonville and Caius College, Girton College, Jesus College, King's College, Hughes Hall, Magdalene College, Pembroke College, Murray Edwards College, Peterhouse, Queens' College, St Edmund's College, Robinson College, St Catharine's College, Newnham College, St John's College, Selwyn College, Wolfson College, Sidney Sussex College, Trinity College, Trinity Hall, Homerton College.

Members in class (*e*) shall be appointed in the Lent Term to serve for four years from 1 October following their appointment.

2. There shall be at least one meeting of the Syndicate in each academical year.

3. The duties of the Syndicate shall be:
(*a*) to provide information and advice about careers for all members of the University;
(*b*) to establish and organize means of communication between members of the University who are seeking employment and employers;
(*c*) to advise the Careers Service Committee on provision of careers advice and guidance, taking into account external and regulatory factors and market conditions in key employment areas;
(*d*) to promote the exchange of ideas between members of the University and representatives of other organizations on matters affecting the employment of graduate and postdoctoral members of the University, in particular by holding seminars and other informal meetings from time to time;
(*e*) to report annually to the Careers Service Committee on its activities and to make recommendations relating to provision of careers advice and guidance.

4. The following shall be paid to the funds of the Syndicate:
(*a*) contributions from organizations and individuals in aid of the purposes of the Syndicate;
(*b*) payments made in respect of commercial activities run by the Syndicate.

5. The Director of the Careers Service shall act as Secretary of the Syndicate.

OBITUARIES

Obituary Notices

Professor JOHN BERNARD BEER, M.A., Ph.D., Litt.D., FBA, Emeritus Fellow of Peterhouse, and former Research Fellow of St John's College, died on 10 December 2017, aged 91 years.

The Rev'd Dr BRENDAN IGNATIUS BRADSHAW, M.A., Ph.D., Life Fellow of Queens' College, former Fellow of St John's College, former University Lecturer in History, died on 10 December 2017, aged 80 years.

GRACES

Graces submitted to the Regent House on 13 December 2017

The Council submits the following Graces to the Regent House. These Graces, unless they are withdrawn or a ballot is requested in accordance with the regulations for Graces of the Regent House (*Statutes and Ordinances*, p. 105) will be deemed to have been approved at 4 p.m. on Friday, 22 December 2017.

1. That Professor Nicola Padfield, Master of Fitzwilliam College, be reappointed one of the Septemviri to serve from 1 January 2018 until 31 December 2019.

2. That Professor Geoffrey Ward, Principal of Homerton College, be reappointed one of the Septemviri to serve from 1 January 2018 until 31 December 2019.

ACTA

Approval of Grace submitted to the Regent House on 29 November 2017

The Grace submitted to the Regent House on 29 November 2017 (*Reporter*, 6486, 2017–18, p. 147) was approved at 4 p.m. on Friday, 8 December 2017.

E. M. C. RAMPTON, *Registrary*

END OF THE OFFICIAL PART OF THE 'REPORTER'

REPORT OF DISCUSSION

Tuesday, 5 December 2017

A Discussion was held in the Senate-House. Deputy Vice-Chancellor Professor Simon Franklin was presiding, with the Registrary's deputy, the Senior Proctor, the Junior Proctor, and 28 other persons present.

The following Reports were discussed:

Topic of concern to the University: the University's investments (*Reporter*, 6484, 2017–18, p. 108).

The Rev'd J. L. Caddick (Emmanuel College):

Deputy Vice-Chancellor, the Regent House is the governing body of the University and the Council is accountable to the Regent House in a number of different ways, one of which is via Discussions such as this one. The Council, or other appropriate body, has to respond to the remarks that are made here. I begin by rehearsing what many people already know because it is possible to gauge just how seriously that accountability is taken from the care with which the Council responds. I have some numbered questions and I look forward to the Council's response.

The call for this discussion was sparked by the revelations in the so called Paradise Papers that the University had made extensive use of offshore investment vehicles to invest, among other things, in oil companies and in oil exploration ventures. The way the University's endowment is invested has been the subject of concern for some time, given our commitment to sustainability as one of the University's core values.

In 2016, the Council published the report of the Working Group on Investment Responsibility. Paragraph 10 of the Report reads:

> Only a small proportion of the University's investment portfolio is therefore owned as securities and managed directly by the University. Significantly, of these directly managed securities, the Group found that at this time the University has no exposure to the most pollutive industries, such as thermal coal and tar sands, and no expectation of having any such exposure in the future. It also has negligible exposure to other fossil fuel industries. In relation to investments managed externally, there are no holdings in tar sands companies and only negligible holdings in thermal coal companies and any future holdings in such companies are expected to be negligible.

It is worth reading this paragraph carefully. It gives the impression that the University has little exposure to fossil fuel stocks. It seems that it was intended to give that impression. At the Council meeting at which the report was discussed – I was then a member of the Council – the Chair of the Working Group when asked if the University really didn't have any carbon stocks, said something along the lines of, 'Well, we've looked and we can't find any'. A member of the Council, sitting next to me, turned to me and said, 'So if we are only talking about homeopathic quantities of money, what is all the fuss about?'

A more careful reading of the report, of course, reveals that indirect holdings are not covered and that is where the vast majority of the endowment is invested. We give the money to fund managers to invest on our behalf. That is what the Paradise Papers are dealing with. So what weight are we to give to the impression created by the report that the University has only negligible holdings in fossil fuels? The Council needs to clear up this confusion, and so we come to the first question.

1. Does the Council think that the 2016 report was misleading and, if so, will it apologize to the Regent House?
2. To avoid any lack of clarity, will the Council immediately publish a list of all the assets the University currently holds, either directly or indirectly, in fossil fuels?

The Report makes a number of recommendations, notably that the University should consider using its rights as a shareholder to engage with companies in which it invests and, secondly, that the Vice-Chancellor and the Chief Investment Officer write to all those who invest money from the endowment on our behalf setting out the University's commitment to sustainability.

3. Can the Council tell the Regent House how many times since the publication of the report it has engaged on issues of sustainability with companies in which it holds shares, and with what result?
4. Can the Council tell the Regent House how many of the fund managers to whom the Vice-Chancellor's letter was sent have adjusted their investment behaviour, and in what ways?

There was considerable disappointment that the report had not seriously engaged with the issue of divestment from fossil fuels, which was one of the concerns that had led to its commissioning. Therefore 140 members of the Regent House (nearly three times the number required) signed a Grace requesting a vote specifically on fossil fuel divestment. In a procedural sleight of hand, rather than putting the issue to a vote (which is what the plain sense of the *Statutes and Ordinances* would seem to require) the Council responded by setting up a further Working Party to look at the issue. It was able to do this because it claimed, in a rather weasel-worded fashion, that it had 'accepted' the Grace. This seems less than straightforward since if it had accepted the Grace then fossil fuel divestment would be official University policy, and it manifestly isn't. Yet.

The current Working Group set up to examine fossil fuel divestment is currently deliberating. Since the revelations in the Paradise Papers go to the credibility of the University's efforts to engage with these questions, it is worth asking in advance of the Working Group's report, what the Council's position will be.

5. If the Regent House does vote for divestment from fossil fuels, will the Council commit itself now to respect and to implement that decision?

The Paradise Papers constitute a story because offshore investments are secret. If this information were in the public domain the media wouldn't have anything to publish. The burgeoning number of offshore secrecy jurisdictions and the mushrooming of the funds that are invested through them constitutes a risk to the financial wellbeing of the whole world economy, as well as a loss to governments of trillions of dollars of tax revenue, tax revenue that could otherwise be spent on things that benefit everyone and not just the super rich, things like universities. It is secrecy that is the problem. As one European official put it, 'Vampires don't like the the sunlight'. So, openness is the only way to reassure members of the Regent House that we are not dealing with vampires. Hence my final question:

6. What steps does the Council propose to take towards publishing a full list of the University's holdings, direct and indirect?

Dr S. R. Kell (Department of Computer Science and Technology):

Deputy Vice-Chancellor, the debate thus far has centred on the issue of divestment from the fossil fuels industry, and this is indeed an important matter. I would like to approach this by first asking a bigger question, as follows: given the University's mission, and given that it delegates investment decisions to an Investment Office rather than having its Trustees oversee them directly, how can we justify *not* having a strong ethical investment policy? It seems to me that we cannot, either in principle or in relation to the technicalities with how charities may and must manage their investments.

This latter issue, of technicalities, has featured heavily in Council communications, notably referring to the 'fiduciary duty' and the issue of 'mandate'. My reading of those technicalities reaches completely different conclusions than those of Council. In particular, the University's present Statement of Investment Responsibility contends (in point 7) that Council has a fiduciary duty to maximize returns, and that only in specific circumstances is it permitted to vary its investment strategy from one that does so. It cites Charity Commission document CC14 in apparent support of that claim. However, by my reading this is false and the document offers no such support. On the contrary: the University has considerable freedom to vary its investment strategy, within certain bounds, and document CC14 describes those bounds in detail. Attempting to justify the University's current policy by reference to these guidelines is completely backwards, and is in fact committing the classic philosophical blunder of neglecting a 'use/mention distinction'. The guidelines concern how to formulate an investment policy; they do not form part of one and in no way justify the University's current policy or lack thereof.

The Statement of Investment Responsibility also falls far short of being a strong ethical investment policy in itself. In particular, it lacks any actionable criteria on what investments are acceptable. Instead, it includes only a cursory provision in paragraph 9, which tells us that:

> the Investment Office will take due care to ensure that its management reflects the interests and values of the University. The Office's exercise of this duty will include actively engaging with fund managers and investee companies to ensure that these interests and values are reflected in how holdings are acquired, managed, and traded, insofar as such considerations are consistent with a primary mandate to generate return.

This convenient final clause can be used to overrule all other concerns. There is no mechanism for holding the Investment Office to account regarding this alleged obligation. In other words, the statement is toothless. My friends who work in finance assure me that without a clear mandate to the contrary, any Investment Office's operation will be geared only towards maximizing the return on investment. Again, this absence of ethical consideration as an overriding concern is wholly unacceptable given the University's mission. (Of course, given the poor performance of fossil fuel stocks, that particular issue ought to be unaffected by this constraint.)

I therefore invite both Council and all members of the Regent House to carefully re-read the Statement of Investment Responsibility, together with the Charity Commission's guidance, and decide for themselves what is possible and what is appropriate for an institution such as ours. Since Council communications are fond of referring to 'fiduciary duty', I would also invite them to read the United Nations' September 2015 report on *Fiduciary duty in the 21st century*, which provides a clear overview of what those duties actually are. In brief, they concern acting in the interest of beneficiaries – which, in the University's case, means acting in the interest of society at large.

Divestment from any harmful industry is foremost a rhetorical gesture. By itself, it will not effect much change. However, in our case it is a potentially powerful gesture in influencing other players to do likewise. Collectively, these changes could make a significant difference. That is why such gestures matter. So far, the debate has instead been preoccupied by worries that a policy of divestment amounts to an agenda of disengagement, of putting up barriers, and therefore that fossil fuel companies – or rather, those divisions and subsidiaries working on actually beneficial technologies such as carbon capture – will no longer be interested in working with us. I find this worry completely far-fetched, for two reasons. One is that companies interact with us because it is in their business interest, not out of any shared mission. Second is that when viewing divestment as a collective action, these companies will surely have no choice but to work with divested instutitions if they work with anyone. For this certainty to emerge, it requires academic leaders actually to show some forward-thinking leadership. Judged by our actions so far in this respect, we are apparently an institution concerned by short-term interests, saving face, maximizing financial returns, and otherwise doing the bare minimum.

Our previous Vice-Chancellor told me that he, like me, believed that fossil fuel companies would continue to work with us on these beneficial projects even if we were to adopt a policy of divestment from fossil fuels. He was instead concerned by what he believed was the hypocrisy of doing so. I do not see any such hypocrisy. The two activities – investment and collaboration – largely play out on separate stages and with mutual understanding of this separation. Where I do see hypocrisy is in what what we presently seem to be doing. We espouse a mission of furthering the interests of society, while studiously ignoring the grave warnings of scientific consensus. We espouse 'concern for sustainability' while conspicuously failing to take a stand. Internally, we seem instead to have fallen into a strategy of self-deception by circulating selective information. As Reverend Caddick pointed out, the Investment Responsibility Working Group's report of May 2016, paragraph 10, managed not to say anything about our exposure indirectly to fossil fuel investments. It says a lot that the authors were not prepared to state directly the fact that the University does hold significant investments in fossil fuels, and that it fell instead to the Paradise Papers and the national press to reveal this. Levels of indirection are a classic technique for hiding information. Council can claim that it does not know the details of what the Investment Office is doing. The Investment Office can claim that it does not know or control the details of what Coller Capital is doing. Coller Capital can claim that it does not know or control the details of what the Shell Technology Ventures Fund is doing. And so on. None of this contradicts the fact that unless reports in the national press are wholly inaccurate, the University *is* investing in fossil fuels, including in new methods of extraction, specifically by means of a $1.7m (US) holding managed by Coller Capital. Presumably there is more where that came from, otherwise the Council's Working Group would have told us. It is difficult to see how this holding is consistent with the Investment Office's obligations as I quoted earlier. Episodes of this kind are liable to keep happening if we continue to run the Investment Office with no overriding ethical criteria in its mandate and little transparency to Council. When the national press reveals details not known to the University or even to members of

Council, it damages the University's reputation and exposes the worst kind of hypocrisy. We simply cannot claim to be fulfilling our mission if we persist without a strong ethical investment policy.

Dr A. C. Copley (Robinson College and the Department of Earth Sciences):

Deputy Vice-Chancellor, I believe that the issue of the University's investments should be considered in two parts: the method of the investments, and the end location of the investments.

In terms of the method of investments, I do enough outreach work to know that this university is fighting a constant battle against false impressions and outdated stereotypes. As such, anything other than complete transparency in all our behaviour causes reputational damage amongst the pool of potential students and staff who are crucial to our continuing success. I therefore encourage the University to take a more transparent approach to investments in the future.

In terms of the end location of investments, I urge the University to resist the calls to divest from hydrocarbon companies, which were renewed following the release of the Paradise Papers. I do not work on hydrocarbons or carbon capture and storage, but through my work as an earthquake-scientist in the Department of Earth Sciences I have encountered representatives of numerous hydrocarbon companies, and seen how these organizations operate. I would like to make it clear at this point that I think human-induced climate change is real, and is the biggest challenge facing humanity. I recognize the good intentions of those calling for divestment, but divestment doesn't actually change the University's environmental impact. For that, one solution is to reduce energy and material usage, as a number of us have done by eating a vegetarian or vegan diet, improving our home insulation and heating, and turning down our thermostats. Indeed, if the University really cares about its environmental impact, I encourage it to take action regarding its daily behaviour, and convert the catering outlets to vegetarian food, and commit to an updating of its heating, insulation, and vehicle infrastructure and policies. However, it is because I am concerned about the environment that I think it is key that the University maintains good relations with the hydrocarbon industry. The international peer-reviewed scientific literature, and the Parliamentary Advisory Group on Carbon Capture and Storage, are agreed that carbon capture and storage at source is essential for a rapid transition to a carbon-neutral society. The technology exists and works, but financial incentives are needed, for example through a carbon tax (which is being supported by a number of hydrocarbon companies). Continuing scientific breakthroughs progressively reduces the level of the required incentive. Large-scale carbon capture and storage at source clearly must involve the companies involved in the extraction of fossil fuels. By maintaining a working relationship with the hydrocarbon industry we can therefore use the University's science to help solve the major problem of our day, rather than hoping that someone else does it for us. In tandem, we can also adjust our own behaviour, and that of the University, to reduce our own environmental impact. I think that combatting climate change is important enough that we need to engage with the stakeholders to ensure that the University is able to play a leading role in the science that is both necessary and potentially world-changing.

Ms E. G. Irwin (Newnham College):

Deputy Vice-Chancellor, I am speaking with the support of the Positive Investment Cambridge group. Following the release of the Paradise Papers, Positive Investment Cambridge wrote an open letter to the University that has been signed by 91 Cambridge academics so far, including 70 members of the Regent House. Signatories also represent 27 Colleges and 28 departments, and nclude Nobel Prize winnters, Fields Medal and Faraday Medal recipients, a former Member of Parliament, and a former Archbishop of Canterbury. The letter is as follows:

> The release of the Paradise Papers has brought to light the University of Cambridge's investments in offshore funds – including those linked to fossil fuel exploration. These investments contravene the University's core values, which include 'concern for sustainability and the relationship with the environment'. Furthermore, such investments may interfere with the new Vice-Chancellor Stephen Toope's stated goal of taking a 'global lead' and making significant societal contributions.[1]
>
> In 2016, the Council updated its Statement of Investment Responsibility in accordance with recommendations made by the Advisory Committee on Benefactions and External and Legal Affairs (ACBELA) Ethical Investment Working Group. Recommendations included engagement with fund managers to ensure investments were aligned with the University's mission and core values.[2]
>
> We, the undersigned, call for the University of Cambridge to take a 'global lead' in fulfilling its Statement of Investment Responsibility in accordance with its mission and core values. We request that the University do the following:
>
> 1. Publish in the January 2018 edition of the *Reporter* the current plan and timeframe for the University's full implementation of the recommendations of the Ethical Investment Working Group, and ensure that all current and future investments, both direct and indirect, align with the Statement of Investment Responsibility.
> 2. Report on how the University's fund managers came to invest in offshore funds via the Cayman Islands and Guernsey.
> 3. As per the dialogue that resulted from Cambridge University Endowment Fund's Chief Investment Officer Nick Cavalla's circulation of a letter to the endowment fund's managers in 2015, a follow-up letter should request details as to how the fund managers' investment strategies aim to align with a two-degree scenario and the University's Statement of Investment Responsibility, and within what timeframe. An anonymized compilation of responses should be publicly released. The University should work with the CUEF's fund managers to negotiate a planned transition away from all deep-sea drilling and oil exploration investments in its private equity, fixed income, and real estate portfolios, including those held in offshore accounts.
> 4. Finally, the University should disclose what percentage of the their funds are currently invested in offshore funds (including via an intermediary) in countries on the Price Waterhouse Cooper list of tax havens.[3]

[1] https://www.cam.ac.uk/news/new-vice-chancellor-for-cambridge-0.

[2] https://www.admin.cam.ac.uk/reporter/2015-16/weekly/6430/section1.shtml#heading2-5: '9. The Investment Office will take due care to ensure that its management reflects the interests and values of the University. The Office's exercise of this duty will include actively engaging with fund managers and investee companies to ensure that these interests and values are reflected in how holdings are acquired, managed, and traded, insofar as such considerations are consistent with a primary mandate to generate return.'

[3] https://www.pwc.pt/en/pwcinforfisco/tax-guide/2017/tax-havens.html.

Dr P. A. Salas (Darwin College and Department of Land Economy):

Deputy Vice-Chancellor, I am currently working in the area of energy and climate change economics. I am here today representing a group of academics from the Cambridge Centre for Environment, Energy, and Natural Resource Governance, working in the topic of the macroeconomic impacts of stranded fossil fuel assets. Our research group is led by Professor Jorge Viñuales, Harold Samuel Professor of Law and Environmental Policy at the Department of Land Economy, expert on international investment law, and by Dr Jean-Francois Mercure, Land Economy Departmental Fellow at Cambridge and Assistant Professor at Radboud University in The Netherlands. Our multidisciplinary research team includes experts on law and policy from the University of Cambridge, energy economics and technology diffusion scholars from the University of Cambridge and Radboud University, natural scientists and experts in climate modelling from the Open University, and macroeconomic modellers from Cambridge Econometrics. Our work has involved advising various governments and institutions on energy and environmental policy, notably, Environmental Impact Assessments for the European Commission.

Before delving into the details of my arguments, I would like to clarify that all the information presented here is purely driven by rigorous scientific analysis, at the highest international level of excellence, in accordance with the mission of the University of Cambridge. Ethical and moral considerations are purposely left outside the argument, which is solely based on scientific findings based on the disciplines addressed by our team: climate sciences, energy and macroeconomics, law and policy, with the approach of impact assessment as a methodology.

First, I will state a summary of our main findings. Then, I will introduce some of the underlying research basis. Finally, I will address the divestment discussion, based on our findings. It is important to mention that our present research relevant for this discussion is in the final stages of peer-review in a high impact journal, and therefore it is not yet publicly available.[1] However, with the aim of supporting a scientific debate on the matter, our group would be happy to provide any details of our research upon request, as long as it is kept confidential, until published in an academic journal.

The main finding of our research is that a carbon bubble may exist, and that it may be financially dangerous to invest or keep investments in fossil fuels-related financial assets, because these may become stranded, i.e. lose their entire value in a short period. If not deflated early, the carbon bubble could lead to a discounted global wealth loss of the order of \$2–4trillion (US), a loss comparable to what led to the 2008 financial crisis. Stranding results from a likely irreversible technological transition that is currently happening, which remains robust even if major fossil fuel producers (such as the US) withdraw from commitments or policies to reduce greenhouse gas emissions. This phenomenon is driven by the current pace of electrification of transport and deployment of renewable energies in the power sector even – and this is very important – if no new climate policy is adopted. But additional climate policy to meet the well below two-degrees-Celsius (2˚C) target set by the Paris Agreement would significantly amplify the extent and effects of stranding.

To understand our findings, it is necessary to address some of the scientific literature related to future energy scenarios, especially in the aftermath of the Paris Agreement. It has been estimated that to have at least a 50% chance of keeping warming below 2˚C throughout this century, the cumulative carbon emissions between now and 2050 need to be below 1,000 gigatons of CO2.[2] This quantity is called the carbon budget. If we burn just the currently known fossil fuel reserves, not even considering the more expensive unconventional resources, we would increase the CO2 concentration in the atmosphere to at least three times our carbon budget.[3] Therefore, irrespective of the specific choices to be made leading to the amounts of oil, coal, and gas that may be used in our global energy system, it is clear that a future which is compatible with the Paris Agreement goals requires that a large fraction of existing reserves of fossil fuels and production capacity remain unused. For individuals or corporations investing in the extraction, transportation, transformation, and distribution of fossil fuels, their assets would become stranded (unproductive). For example, pipelines, refineries, and tankers would become unused if some types of fossil fuels become uneconomical to extract from the ground. If fossil fuel assets are set to lose their value, they would become stranded assets, as creditors default on their payments to lenders, giving rise to the bursting of a financial bubble, the 'carbon bubble'.

While the existence of a carbon bubble might be questioned on grounds of credibility or timing of climate policies, the evidence shows that global demand growth for fossil fuels is already slowing down. The question then is whether under the current pace of low-carbon technology diffusion, fossil fuel assets are bound or not to become stranded, not necessarily due to climate policy, but simply due to new trajectories in renewable energy deployment, transport fuel efficiency, and transport electrification. Indeed, the technological transition currently underway has major implications for the value of fossil fuel assets, even if no additional climate policies are adopted, which is now unlikely. The financial sector's response to the low-carbon transition will largely determine whether the carbon bubble burst will prompt a 2008-like crisis, as was recently emphasized in a speech by Mark Carney, the Governor of the Bank of England.[4]

Using a simulation-based integrated energy-economy-carbon-cycle-climate model, we analyzed a series of future energy scenarios, which model the trajectory of deployment of low-carbon technologies. Our analysis, based on up-to-date technology diffusion data, suggests that a low-carbon transition is already underway in the power and the transport sectors. Under these conditions, the lower demand for fossil fuels will lead to substantial production losses for the fossil fuel industry, whether stringent climate policies are adopted or not. However, the effect is highly intensified if climate policies are indeed adopted. For individual countries, the effects vary depending on regional marginal costs of fossil fuel production, with concentration of production in the Organization of the Petroleum

Exporting Countries (OPEC countries) where costs are lower. Regions with higher marginal costs might experience a steep decline in production (such as Russia), or even lose almost their entire oil and gas industry (such as Canada and the US).

The magnitude of the losses also depends on whether or not low-cost fossil fuel asset owners (such as OPEC) decide to increase their production to outplay other producers (this is called a 'selling-out' behaviour). Under a selling-out scenario, fossil fuel markets outside of the Middle East substantially shrink, and prices fall abruptly between 2020–2030, leading to a potentially disastrous scenario with substantial wealth losses to asset owners (e.g. investors and countries) worldwide.

From our analysis, we conclude that risk is undervalued in fossil fuel investment ventures. The 'carbon bubble' stems not only from the credibility of climate policy but also from a likely irreversible low-carbon transition currently underway leading to a fall in fossil fuel demand. As the transition is already under way, even large countries, such as the US, cannot change the overall trajectory on their own. That's because any country's policy only affects its own domestic demand, and no country can control what happens in the rest of the world (i.e. force other countries to consume more fossil fuels). Withdrawing is, in fact, detrimental for such countries, because it affects their trade balance and deprives them from the benefits of developing new technologies. In other words, contrary to a long-held view, climate policy is not, or at least no longer, a prisoner's dilemma where unco-operative countries would free-ride the efforts made by other countries to mitigate climate change.

If a large fraction of the global fossil fuel industry eventually becomes stranded, these impacts should be felt in two independent ways: (*a*) through wealth losses of fossil fuel companies and their shareholders, and (*b*) through macroeconomic change (gross domestic product (GDP) and employment losses in the fossil fuel industry) leaving winners and losers. Due to different country reliance on the fossil fuel industry, impacts have different magnitudes and directions: importer countries will gain out of reducing their imports when adopting low-carbon technologies, while exporters will lose an important source of income and employment. China, for instance, would come out as a beneficiary of the transition whereas the high-cost fossil fuel asset owners would likely be adversely hit.

In summary, our findings support the existence of a carbon bubble which, if not deflated early, could lead to large financial losses for fossil fuel asset owners. As recently stressed in a report by the Department for Environment, Food, and Rural Affairs (DEFRA) and the Bank of England,[5] for any institution with substantial investment portfolios, exposure to fossil fuel assets needs to be critically assessed, and risk must be evaluated on face value. Stranded fossil fuel assets could become a reality, with which slow-reacting investors could become trapped. Consequently, in the context of the divestment discussion, our findings support the argument that the University of Cambridge should divest now from fossil fuels, due to the increasing risk associated to holding these types of assets.

[1] J.-F. Mercure, H. Pollitt, J. E. Viñuales, N. R. Edwards, P. B. Holden, U. Chewpreecha, P. Salas, I. Sognnaes, A. Lam, and F. Knobloch, 'Macroeconomic impact of stranded fossil fuel assets', under review.

[2] Meinshausen, M. *et al*. Greenhouse-gas emission targets for limiting global warming to 2˚C. *Nature* 458, 1158–62 (2009).

[3] McGlade, C. and Ekins, P. The geographical distribution of fossil fuels unused when limiting global warming to 2˚C. *Nature* 517, 187–90 (2015).

[4] Carney, M. *Breaking the tragedy of the horizon – climate change and financial stability*. Speech given at Lloyd's of London (2015). http://www.bankofengland.co.uk/publications/Pages/speeches/2015/844.aspx.

[5] Bank of England. *The impact of climate change on the UK insurance sector*. (2015). http://www.bankofengland.co.uk/pra/Documents/supervision/activities/pradefra0915.pdf.

Ms F. van der Spek (Newnham College and CUSU Ethical Campaigns Officer):

Deputy Vice-Chancellor, today I am speaking with the support of the Zero Carbon Society.

We are running out of time; climate change is here. We have just witnessed a summer of record-breaking natural disaster, bringing desolation to tens of thousands, and misery to millions more. It is estimated that we have a mere three years left to reach peak emissions if we are to have a serious chance of saving ourselves, and the world, from catastrophe. Still, oil companies are exploring for more. The immediacy and severity of this crisis, and the need to stop funding the industry most responsible is clear.

The divestment campaign in Cambridge has been met with overwhelming support from the student body as well as academics. A petition for divestment gathered over 2,300 signatures. Both CUSU Council and UCU have unanimously passed motions in favour of divestment. I remind those present of the Grace passed in this house only a few months ago, signed by 140 members of the Regent House, which states:

> That the Regent House, as the governing body of the University, resolves that none of the University's Endowment Funds should be invested directly or indirectly in companies whose business is wholly or substantially concerned with the extraction of fossil fuels, and requires the Council to publish a Report to the University within twelve months setting out how this is to be achieved.

This never happened.

In its rhetoric, the University has pretended to take its democratic principles and the threat of climate change seriously. We have been repeatedly assured that it holds minimal investments in fossil fuel companies. Yet recently it has been revealed that all this time, Cambridge has misled its staff, its students, and the public. The Paradise Papers have exposed that the University holds substantial investments in offshore funds, avoiding taxes on hedge funds as well as investing in oil exploration and deep-sea drilling. The obvious immorality and hypocrisy of these investments aside, this scandal has brought to light the complete lack of transparency and integrity of the University's financial practice. As a charity, a social leader, and a public institution, the University does not only have the responsibility to invest in a way that is in line with its core values; it also has the responsibility to be aware of how it invests and a duty of clarity towards the public. The findings of the Paradise Papers undermine and delegitimize all previous efforts of the University to establish an ethical investment policy, since transparency is a prerequisite for a genuinely ethical financial practice.

Against the ever-growing call for divestment and accountability, the University's response has been a deafening silence. Cambridge's reputation has been severely damaged, faith in its practice has been lost, and the trust of its members broken.

The University has no arguments left for not divesting from fossil fuels, but I would still like to address some of the excuses we have heard in opposition to divestment. To begin with, the notion that divestment would seriously affect the University's research interests. Two weeks ago, at the Shell annual lecture in Emmanuel College, Andrew Brown, member of the executive board of Royal Dutch Shell, stated repeatedly and explicitly, that Cambridge disinvesting would not lead to any cessation of research with the University. I quote Andrew Brown: 'even if there's disinvestment we would continue to research.' This, combined with the fact that those universities that have already divested have seen no cut in their research funding, proves that this concern is wholly unfounded.

Secondly, there is the idea that the University, through engaging with fossil fuel companies, would be able to influence them for the better. Historically, engagement has never worked, divestment has. It is highly unlikely that a company whose entire business model is based on the extraction of fossil fuels, could be fundamentally changed to fit a zero carbon future. As an example, let's look at two motions that were voted on by Shell's shareholders the past two years. Once again, I quote Andrew Brown:

> in the first instance they wanted us to just commit to just renewables investments, and in the second case they wanted us to certify that we would follow our own portfolio in line with the Paris Agreement. The first one got voted down 97%, the second one 93% of shareholders said, 'no that's not what we want Shell to be'.

Given the urgency of the impending climate crisis, shareholder engagement is effectively a waste of time we don't have and a waste of the opportunity of investing in genuinely ethical and sustainable alternatives. Additionally, if, as the Paradise Papers have shown, the majority of the University's investments in fossil fuel companies is invested indirectly and through offshore funds, the University holds no shareholder power whatsoever. The minimal positive influence the University might be able to exercise as a shareholder is negligible compared with the immense power it has as a public and highly regarded institution. Cambridge divesting from fossil fuels would not go unnoticed.

Therefore, it is time that the University becomes the world leader it claims and aims to be. Let us live up to our name, and restore the integrity and reputation of this institution by providing true progress to the world.

The answer to 'whether' Cambridge should divest has long been clear; the question of 'when' remains. I sincerely hope that the answer will not be: 'when it is already too late'.

Mx E. O. C. Travis (St John's College, and Committee Member of CUSU LGBT+, Women's, and Disabled Students' Campaign) and Ms M. Finnamore (Trinity College, and member of CUSU BME and Women's Campaign):

Deputy Vice-Chancellor, the University of Cambridge has continually stressed, in response to growing pressure from multiple directions pushing for divestment, that its direct investments involve 'negligible exposure' to fossil fuel industries, and that even in indirect investments it has 'negligible holdings'[1] in coal and tar sands. The leaking of the Paradise Papers and its revelations regarding the University of Cambridge's investments in offshore funds, including in a joint venture to develop oil exploration and deep-sea drilling, reveals the true level of disingenuity behind this assertion. It also reveals, as have the speakers who have underlined this, the complete lack of transparency involved in the University's investment processes.

Other speakers have spoken very eloquently on the financial and environmental impacts of this; I'm going to talk about how this opaqueness is antithetical to the University's responsibilities as a charitable and educational institution when it comes to the ability to provide ethical assurances that money from students and donors is not being used in a manner that disregards issues of human rights. As reported in the 2016 Report of the Working Group on Investment Responsibility, a member of the Working Group who was also a member of the University Investment Board 'provided assurance that she [was] not aware of any instance of a financial asset that conflicts with the University's values.'[2] Considering that it was in this same report that the aforementioned misleading claims regarding the University's investments were made, questions of ethical investment and moral responsibility are therefore undermined and thrown into question, both in relation to fossil fuel investments and more widely. Can the University claim with certainty, for example, that its financial assets are not tied in any way to areas such as the arms trade? (Freedom of Information requests on this particular topic have, incidentally, been denied thus far by the University.)

We as members of the University's liberation campaigns, which include the Women's Campaign and the Black and Minority Ethnic Students Campaign, wish to highlight the disproportionate effects of climate change – and, therefore, the results of where this University invests – on marginalized and disenfranchised groups worldwide. Every country classified at 'extreme risk' by the Climate Vulnerability Index is in the postcolonial Global South, while the vast majority of blame for global warming lies with the Global North (with the UK's potential reserves accounting for almost a fifth of the global carbon budget). Furthermore, the United Nations Framework Convention on Climate Change (UNFCCC) highlights that:

> climate change has a greater impact on those sections of the population, in all countries, that are most reliant on natural resources for their livelihoods and/or who have the least capacity to respond to natural hazards. Women commonly face higher risks and greater burdens from the impacts of climate change in situations of poverty, and the majority of the world's poor are women.[3]

It is absolutely clear that so long as this University holds its investments in companies that choose to exploit the rights of those most vulnerable, it legitimizes its governing body's colonial sense of entitlement to fuelling a climate crisis which disproportionately affects the world's poorest and most marginalized, whilst suppressing and abusing the rights of any local peoples who oppose their profiteering and its catastrophic ecological consequences.

Moreover, even besides the human rights catastrophe that is the University's complicity in climate change generally speaking, the University holds investments in corporations that have very direct links to specific human rights abuses. Shell, for example, paid $83.5 million in compensation to Bodo communities for damage caused by oil spills in 2008 and 2009, were sued over claims of sexual harassment and discrimination in the workplace in 2017, and are now facing new criminal enquiries led by Amnesty International regarding alleged human rights abuses in Nigeria in light of recently revealed evidence. In holding investments in companies like Shell, the University of Cambridge is saying 'yes' to Shell's involvement in the brutal campaign to silence climate protesters in Ogoniland, Nigeria, in 1993. The University is saying 'yes' to Shell's wilful encouragement of the military to deal with those protests even when Shell knew that this course of action would lead to unlawful killings. It is saying 'yes' to a corporation with a military commander notorious for human rights violations on its payroll. The director of global issues at Amnesty International has said that:

> the evidence shows Shell repeatedly encouraged the Nigerian military to deal with community protests, even when it knew the horrors this would lead to – unlawful killings, rape, torture, and the burning of villages.

University of Cambridge, so long as we are complicit in fossil fuel company investments, we are coerced to say 'yes' to what Amnesty has described as 'murder, rape, and torture'. It is indisputable that Shell played a key role in the devastating events in Ogoniland. Through their investments in Shell the University sponsors and approves these disgraces.

Shell are not alone in direct links to human rights abuses. In 2001, eleven Indonesian villagers filed suit against ExxonMobil on the grounds that it was complicit in atrocities committed by Indonesian security forces, alleging that soldiers hired by ExxonMobil to protect its operations had shot, sexually assaulted, and tortured the villagers. A US federal district judge ruled in 2008 that ExxonMobil and its Indonesian subsidiary could indeed be considered liable for these crimes, and the case is ongoing in US federal court. BP, meanwhile, is the largest foreign investor in Azerbaijan and is closely tied to a regime that has holds over one hundred political prisoners, human rights lawyers among them. The social justice organization Platform have decried a 'marriage of mutual convenience'[4] between BP and Azerbaijan's Aliyev dictatorship. In Colombia in the 1990s, BP was also party to a series of severe human rights violations, as a major shareholder of oil company Ocensa which was found not only to have supplied military equipment to the notorious 14th brigade, who were involved in various atrocities, but also to have been party to the kidnapping of a trade union leader, Gilberto Torres, whose abductors admitted to the court that Ocensa had paid them $40,000 to kidnap and assassinate Torres because of the trouble he was causing to the oil production process.

It is bad enough that the University should hold investments in any companies responsible for fuelling the climate crisis, let alone corporations who are guilty of such flagrant human rights abuses in the countries in which they are drilling, and who, indeed, are unrepentant; Andy Brown, one of the directors of Shell, said in a public talk at Emmanuel College two weeks ago that he was 'fundamentally proud' of Shell's operations in Nigeria. In light of the recent evidence uncovered by Amnesty regarding these operations, and in the face of a laundry list of connections to various human rights abuses worldwide, can the University of Cambridge say that it is 'fundamentally proud' of its decision to invest in corporations such as Shell, BP, and ExxonMobil?

As the 2016 Investment Working Group Report states, an exception to the principle that 'the primary object of the University's investment activity should [...] be to seek the maximum financial return over the long-term'[5] is that:

> charities should not invest in types of business that would create a patent or reasonably self-evident conflict with the aims of the charity. Thus, for example, trustees of temperance societies should not invest in breweries or distilleries, regardless of the financial consequences.[6]

The University of Cambridge states that its mission 'is to contribute to society through the pursuit of education, learning, and research at the highest international levels of excellence'.[7] As other speakers have mentioned, sustainability is one of the University's stated core values. We believe that investment in fossil fuels, especially in light of recent research from Oxford that shows that the 2˚C capital stock has been reached this year[8] meaning that no new carbon projects can take place if we are to keep global warming to a two-degree limit as decided in the Paris Agreement, does in fact 'create a patent or reasonably self-evident conflict' with the University's stated mission. From an ethical point of view, for a leading educational institution to invest in fossil fuels and in companies such as these that have a laundry list of human rights abuses attached to their names, is precisely analogous to a temperance society investing in breweries, and carries consequences of infinitely greater severity for human rights and for the survival of our society.

[1] http://www.admin.cam.ac.uk/reporter/2015-16/weekly/6430/Investment-Responsibility-Wkg-Grp-Report.pdf (B.10).

[2] *ibid*. (B.12).

[3] http://unfccc.int/gender_and_climate_change/items/7516.php.

[4] http://platformlondon.org/p-publications/all-that-glitters/.

[5] http://www.admin.cam.ac.uk/reporter/2015-16/weekly/6430/Investment-Responsibility-Wkg-Grp-Report.pdf (C.15).

[6] *ibid*. (C.16).

[7] https://www.cam.ac.uk/.

[8] http://www.sciencedirect.com/science/article/pii/S0306261916302495.

Mr A. J. R. Satow (Magdalene College):

Deputy Vice-Chancellor, I am speaking here today with the support of Cambridge Defend Education. For the sake of clarity, it's also worth saying that my commitment to social justice extends to environmental justice too, and so I have also been a member of Cambridge Zero Carbon Society for two years.

Deputy Vice-Chancellor, Cambridge Defend Education was founded in 2010 in response to the trebling of tuition fees, and it continues to fight for a democratized and decolonized University. These issues are at the heart of the Paradise Papers, and they are at the heart of the University's investment practices. Ultimately, they raise the question 'On whose behalf are these investments being made?' and, from here, 'Whose University is this?'

It was recently reported by *The Guardian* that Cambridge University (and many of its Colleges) are investing millions in offshore Cayman Island hedge funds, hedge funds themselves investing heavily in Royal Dutch Shell. There was a joint venture with Shell into deep sea oil exploration, as we have been hearing.

Yet, despite overwhelming pressure, Cambridge University refuses to divest from fossil fuels, refuses all requests for transparency in its investment practices, and refuses to make any material changes to these practices. But when we say 'Cambridge won't do these things', who do we mean? We surely don't mean the students: 2,000 of them signed the petition for divestment in its first year; last month CUSU Council unanimously backed a motion criticizing the University's investment practices and restating our desire for divestment. We surely don't mean the Fellows and Regent House members: as Jeremy Caddick was telling us, 140 of them signed a Grace calling for divestment, which passed without opposition. And we surely don't mean the research being produced by this institution: Cambridge's Institute for Sustainability Leadership last year published a paper calling for a just transition to a low-carbon economy.

So who do we mean when we say 'the University won't divest from fossil fuels'. Ultimately, we mean an unelected and out-of-touch bureaucracy. I don't need to state all the arguments for fossil fuel divestment, how Oxford University research is telling us there can be no more fossil fuel projects anywhere if we're to remain below the universally-agreed two-degree limit on global warming; I don't need to emphasize that as things stand we have just a 5% chance of remaining below two degrees, or how the biggest threat to this is a fossil fuel industry which refuses to change and refuses to stop drilling. I don't need to say these things. Because the members of the University have already agreed on them. Because we all recognize that time has run out, that climate breakdown is here, and that it is the duty of this University, which the new Vice-Chancellor has declared must be 'a social leader', to immediately divest and reinvest its endowment for the social good. We all view the University as a charity, not a business. Divestment would be a huge statement heard across the world – we all agree Cambridge should use its power for good.

Opposition to divestment does not come from a democratic base, it comes from money. It is truly shocking that the University's latest Working Group on Divestment (intended to delay affairs just as the time to prevent ecological catastrophe runs out) has on its committee several members with interests in the fossil fuel industry. Lord Smith is the Chair of the supposedly Independent Task Force on Shale Gas. Let me tell you now there is nothing at all independent about this pro-fracking lobbying organization, which is funded by fracking and fossil fuel companies. The suggestion that Lord Smith is a neutral party in this matter is absurd. Even more ridiculously, Dr Jerome Neufeld, a Research Fellow at the BP Institute, sits on the group. Turkeys don't vote for Christmas, and Dr Neufeld won't be voting for divestment, I can tell you that now. Nor will Professor Simon Redfern, chair of the Department for Earth Sciences, which is often funded and sponsored by the fossil fuel industry. The dynamic at play here is clear: democracy and justice against the profit motive. Cambridge Defend Education stands for democracy, we stand for justice, we stand for divestment.

This matter was, of course, already addressed by a previous Working Group, as we have heard, which produced a whitewash of a report in 2016, and which entirely ducked the question of fossil fuel divestment, which had in fact been key in its mission statement. It offered cosmetic and superficial changes to the University's Statement of Investment Responsibility, alongside an open letter from the former Vice-Chancellor to the University's fund managers declaring that 'climate change is the deepest environmental problem of our times', and asking them to consider this when managing the University's investment portfolio. The irrelevance of this letter is now clear. What use are such empty words while the managers continue to invest large quantities in fossil fuel companies via dodgy offshore funds?

In response, students and academics have risen up demanding divestment. Yet still we hear nothing from University management. All it does is defend itself in statements to the press, ducking the question of whether it was dodging US Unrelated Business Income Tax through blocker corporations.

Last week Amnesty International, as we have been hearing, called for a criminal investigation into Cambridge's close business partner Royal Dutch Shell, for alleged complicity in serious human rights violations (including rape, torture, and murder) in Nigeria in the 1990s. This plays into a wider pattern of colonialist violence, whereby Western fossil fuel companies extract resources from the Global South, often being accused of human rights abuses in the process, before burning them for profit. It is then these same countries which suffer worst from the effects of global warming and climate breakdown. ExxonMobil is being sued in US courts for fraud, Shell is accused of complicity in serious human rights abuses, Cambridge is revealed to be investing large amounts in Shell via offshore funds. And what do we hear from University management? Nothing.

That's not good enough. Zero Carbon demanded transparency, accountability, and divestment from both offshore funds and fossil fuels in response to the Paradise Papers revelations. But University management have done nothing whatsoever. Indeed they are probably still investing in these offshore funds. Meanwhile, they are keeping us all in the dark, from students to members of University Council. This is not democratic, and it is not charitable.

It only begs the question: what else are they investing in? A 2013 *Varsity* investigation found that the University and its Colleges were investing in arms manufacturers. There is no reason to think this is not still the case. Does the University profit from companies which exploit child labour, disabled people, or other vulnerable groups? These are urgent questions which University management must answer. In the absence of action, and in the absence of any response whatsoever, Cambridge Defend Education support Zero Carbon's call for a student and staff-led committee to establish a genuinely ethical investment policy.

The University boasts of Regent House as 'the embodiment of the University as a democratic institution', (I am quoting from their official report), yet ignores its crystal-clear call for divestment. It is continuing to ignore the student body.

But even worse, it is behaving, and investing, in a manner contrary to its aims. As a charity, whose mission statement includes 'a concern for sustainability and the environment' and a stated desire to contribute positively to society, it should not be investing in the fossil fuels industry or any other immoral industry. This is not just rhetoric, it is also law. Environmental, social, and governance criteria should be taken into account for investment decisions, as recognized by the 2016 report.

Cambridge Defend Education wants to go further. We want to make the University's mission statement into genuinely enacted values, rather than empty platitudes. We want the University's investments to be transparent and accountable to its membership. We want University decisions to be taken not by men with financial conflicts of interests, but democratically, accountable to the wider University community. The Paradise Papers have revealed a disease in Cambridge's administration, something is rotten in the state of Cambridge, a desire for profit has swallowed up any concern for society, the environment, or university democracy. We here today say enough is enough, and demand radical change. Ultimately, this includes questions of governance and democracy in Cambridge. But it starts with full divestment from fossil fuels.

Ms D. E. Eyre (President of CUSU, and University Council):

Deputy Vice-Chancellor, the Paradise Papers have shocked the student body just as they have wider society. They have shown that the University holds substantial investments in offshore funds, avoiding taxes on hedge funds as well as investing in oil exploration and deep-sea drilling. This contravenes the University's repeated assurances that it has minimal exposure to fossil fuel companies. Critically, it reveals a dishonesty and an opacity right at the top of this institution. But, we must ask, why is the University investing in this way? What's it all for? Presumably it's to generate the revenue so the University can function. Is it worth it? Is it necessary? I would argue comprehensively no.

Tax avoidance might in some cases be legal but that does not mean that it is moral and that we should stand for it. There are also questions around this financial logic, as we have seen: is exposure to a fossil fuel industry really in the long-term financial interest of the University, given that the industry can have no long-term future and will be regulated against? And we must also remember what this University is for. The University's mission is, I quote, 'to contribute to society through the pursuit of education, learning, and research'. It also explicitly states as a core value, 'a concern for sustainability and the environment'. The University exists for its students. And the University exists for the wider world. We have heard much about the impact of fossil fuel investment for the wider world. These are investments in the companies that are driving climate change and committing human rights violations. But what about the students? If the University is run for the students, then what the students think matters. Well, as the President of the Students Union, I can say that the student body has made its opinion clear.

A CUSU motion last month unanimously voted in favour of divestment and the Graduate Union has passed a similar motion. Over 2,000 student and academic signatories have signed on in support. As we know, the Regent House has similarly democratically mandated the University to divest. Cambridge boasts of the Regent House as 'the embodiment of the University as a democratic institution', but it ignores this when it is inconvenient. And it is clearly ignoring the students.

A report hosted by the United Nations concluded quite clearly that 'Fiduciaries should act in good faith in the interests of their beneficiaries' and that 'fiduciaries should take account of their beneficiaries' views as to what constitutes their best interests'. Let me quickly note that report also states that:

> Trustees were able to take into account wider considerations – including [Environmental, Social, and Corporate Governance] issues relevant to financial returns, macroeconomic factors, non-financial factors (such as quality of life and 'purely ethical' concerns), and the views of beneficiaries – provided that such decisions do not cause significant financial detriment.

Well, here is what we, as students, as beneficiaries, are delcaring as our best interests:

- A University that is not investing in and hence morally legitimizing an industry that is destroying our collective futures and is disproportionately damaging to poor people and people of the Global South;
- a University that takes on board the evidence that divestment can be achieved without significant financial loss and need not compromise research funding;
- a University that responds to the mandates of its democratic apparatus;
- and, critically, a University that is not opaque about its investment strategy but is, rather, transparent and thereby allowing of a broader informed discussion on these issues that affect us all.

The University have rejected numerous Freedom of Information requests for full disclosure of their investment portfolio in the past on the grounds that it would prejudice their 'commercial interest' and is therefore not in the 'public interest'. Can the University please allow the public, the students, and certainly the Council, into this discussion so we can say for ourselves what is in our interest? The dishonesty and opacity that the Paradise Papers have only further compromised claims that the University's financial management is in our 'best interest'. We are not interested in tax avoidance. We are not interested in fossil fuel investment. What we are interested in is transparency and democracy. What we are interested in too is environmental justice. 'Yes', you might say, 'oh, but you are interested in the financial support this endowment affords you'. In 2017, when climate change is increasingly devastating people, and the planet, but an alternative enrgy system is totally within our grasps, I am willing to say, 'no, a fossil fuel endowment is not in anyone's best interests'.

Dr M.-C. Cordonier Segger (Lauterpacht Centre for International Law):

Deputy Vice-Chancellor, I offer these points in my personal capacity as a legal expert involved in the negotiation of the Paris Agreement, who has published several books and articles on trade and investment law in relation to sustainable development and climate change. I recognize and highlight, as others have today, the core values of the University of Cambridge, particularly our commitment to sustainability.

It is important to support the call to express this commitment, firmly and clearly, to all those who manage and make decisions about the flows of our University's financial investments. Respectfully, in light of the Paris Agreement, and in recognition of the crucial efforts of nearly all countries of the world, including the United Kingdom and Canada, and many others who have very little, together with thousands of educational institutions and other civil society organizations, and also leading firms, we should consider especially the Paris Agreement Article 2.1, which commits

> to strengthen global response to the threat of climate change … by … making finance flows consistent with a pathway towards low greenhouse gas emissions and climate resilient development.

The Paris Agreement provides for action by non-state actors. Indeed, in our negotations, many countries have begged for it. The Paris Agreement also provides for transparency, and indeed in the actions that have been taken to meet our commitments, there are many, many ways of securing that transparency. I do believe that it is crucial to consider the signals that we send, as a world-leading educational institution, and the risks we choose to invest in, or otherwise support. It behoves us to invest responsibly, for sustainable development, in the interest of current and future generations.

Mr A. M. Reid (Wolfson College and Director of the Finance Division):

Deputy Vice-Chancellor, I do have links with and a great deal of interest in this subject. More specifically, I am the Secretary of the Investment Board, so I declare that. You did ask me not to come back to things addressed before, but I must come back to Jeremy Caddick's comment.

Firstly, can I just come to the Paradise Papers, just to explain a little bit more about what these offshore funds are about. The purpose of institutional offshore funds is to minimize costs by aggregated investors. Usually, they come from different jurisdictions around the world into a single investment fund rather than multiple vehicles, and to ensure that there's a single level of taxation in their given jurisdiction – so in our case in the UK.

Most of the Cambridge University Endowment Fund is invested outside the UK. The world's investment markets are big and the UK is a pretty small part of it. The majority of the Endowment Fund is invested outside the UK's asset-base. As a charity, the Fund is exempt from tax in the vast majority of the jurisdictions that we invest, which is why a single level of taxation put through a pooled fund makes sense to us. The offshore markets in which the Endowment Fund may invest are properly regulated, efficient, and well-run. In all cases we disclose our identity to administrators and to tax authorities both in those jurisdictions and of course in the UK where we have to give our tax return to HMRC.

The suggestion is that the Endowment Fund has been using offshore funds to make significant investments in fossil fuels. That is simply not the case. I'll give you some data in just a moment. The position on fossil fuel investment remains as reported in 2016 by the Working Group on Investment Reponsibility. This is where I repeat Dr Caddick. Yes, that report did say in respect of investments managed externally (the majority of our investments):

> there are no holdings in tar sands companies and only neglible holdings in thermal coal companies and any future holdings in such companies are expected to be negligible.

That position is unchanged. Nothing in the Paradise Papers changes that.

The Report of the Working Group on Investment Responsibility which was endorsed unanimously by Council – and Dr Caddick was a member of Council at that time – rejected full divestment of any asset class (though we were perhaps focusing on fossil fuels at the time), in favour of a policy of active engagement with fund managers. We had an open letter from the Vice-Chancellor and from the Chief Investment Officer sent to all the funds' external managers. That letter stated:

> The University's Investment Board and the University's Investment Office expects its appointed investment managers to incorporate an assessment of climate change risks into their investment processes.

Following that letter, the Investment Office has continued to engage with fund managers on this and on their overall environmental, social, and governance approach. In particular, it surveyed all the active equity managers, and it is clear from their responses that there is widespread support for the University's approach.

Back to fossil fuels. As you will know, the Council set up a Divestment Working Group to consider the question of divestment from businesses involved in fossil fuel extraction. That Group has been informed of the current investment by Cambridge University Endowment Fund in fossil fuels and actually strictly in the energy sector which includes renewables (not just extraction and production of oil and gas but including transport, marketing, oil services companies, and things like that). If you're trying to get a picture of the investment universe of energy and fossil fuels type, it's a little over seven per cent as measured by the MSCI All Country World Index. The Divestment Working Group was given the precise proportion of the Endowment Fund which is invested in this overall asset class. That number is confidential but is less than about half that number. Cambridge University's Endowment Fund has limited investment in fossil fuel and energy businesses.

Mr A. L. Odgers (Chief Financial Officer), read by the Junior Proctor:

Deputy Vice-Chancellor,

The Paradise Papers

The publication of the Paradise Papers by *The Guardian* newspaper, which said the University and some Colleges had invested in Cayman-registered funds, has renewed questions on the University's approach to investment and its holdings in fossil fuels.

The initial reporting focused on the use of the Caymans for secrecy and tax avoidance. However, the newspaper subsequently had to correct its story to make clear that the use of the Cayman funds was to save costs for the University rather than taxes.

The purpose of the institutional 'offshore' market is to minimize costs by aggregating investors, usually located in several different jurisdictions, into a single investment fund, rather than multiple vehicles, and to ensure that these investors are subject to one level of taxation in their given jurisdictions, rather than two.

There is a clear distinction between open use of legal mechanisms to ensure compliance with tax laws, and the misuse of offshore centres to evade tax, commit fraud, or hide wealth from legitimate scrutiny. The University condemns any such illegal or unethical behaviour.

Most of the Cambridge University Endowment Fund (CUEF) is invested outside the UK. As a charity, the Fund is fully or partially exempt from tax in the jurisdictions in which we invest.

The offshore markets through which the endowment may invest are properly regulated, efficient, and well-run. In all cases we disclose our identity to administrators and to tax authorities.

The newspaper also sought to suggest that the funds were used to make significant investment in fossil fuels. That is not the case. The position on investment in fossil fuels remains the same as that which was reported in 2016.

Working Group on Investment Responsibility

This position was set out by the Working Group on Investment Responsibility, which was set up by the University Council in May 2015 and reported back in June 2016.

That report made it clear that, like many other institutions in the charity and higher education sectors, direct holdings are the exception rather than the rule. Only a small part of the University's investment portfolio is managed directly by the University. The report said:

> Of these directly managed securities, the Group found that at this time the University has no exposure to the most pollutive industries, such as thermal coal and tar sands, and no expectation of having any such exposure in the future. It also has negligible exposure to other fossil fuel industries.

The University holds most of its investments indirectly through pooled funds and other vehicles run by third-party managers who oversee the individual securities. On these, the report said:

> In relation to investments managed externally, there are no holdings in tar sands companies and only negligible holdings in thermal coal companies and any future holdings in such companies are expected to be negligible.

Nothing in the Paradise Papers changes this position.

The report, endorsed by Council, rejected full divestment in favour of a policy of 'active engagement' with fund managers. It also recommended an open letter from the Vice-Chancellor and the Chief Investment Officer to its external managers. That open letter stated:

> The University's Investment Board and Office expects its appointed investment managers to incorporate an assessment of climate change risks into their investment processes.

The letter made it clear that future action by governments, including, for example, fiscal and regulatory change concerning carbon, was likely to affect the economic attraction of investments in this sector. Conversely, it said that companies which diversify away from the most environmentally damaging activities are likely to have better long-term success and therefore the best return on investment.

Following the letter, the Investment Office has continued to engage with fund managers on this and on their overall environmental, social, and governance approach. In particular, it surveyed all of the active equity managers. It is clear from responses that there is widespread support for the University's approach.

Divestment Working Group

In May 2017, the Council set up the Divestment Working Group (DWG), to consider the question of divestment from businesses involved in fossil fuel extraction.

The DWG has been informed that the University's exposure to the energy sector in June 2017 (including both fossil fuels and renewables) remains well below the global stock market average (using the MSCI All Country World Index).

The DWG is continuing with its work, including wide consultation and open Town Hall meetings. It is expected to produce at least a preliminary report by May 2018.

Dr J. E. Scott-Warren (Gonville and Caius College and Faculty of English), read by the Senior Proctor:

The current issue of the *New Yorker* carries a cartoon in which a besuited father is shown waving a document before the eyes of his besuited son, in an office high up in a skyscraper. The caption reads: 'Someday all these anonymous offshore accounts will belong to shell companies of which you will deny all knowledge'. Out of the window, in the distance, four chimneys are belching smoke into the air.

The cartoon is highly pertinent to the subject of this Discussion. In its response to the campaign to put an end to its investments in fossil fuels, the University asserted that its investments in fossil fuel companies were 'negligible'. Curiously, this appeared to count for the University as an argument against divestment rather than for it. In the absence of any hard facts and figures, this led some of us to entertain suspicions about the veracity of the claim.

Thanks to the recent leaking of the Paradise Papers, we now know that the claim was spurious. It turns out that the University and its Colleges have placed large sums in offshore funds. On the University's side, these include a Guernsey-based private equity firm that invested in a joint venture of Royal Dutch Shell, supporting the development of 'innovative and efficient drilling rigs' that can 'reach hydrocarbons in deeper horizons'. This is the kind of innovation and efficiency that the world can do without.

The leak also showed that a host of Colleges, including Clare, Downing, Emmanuel, Gonville and Caius, Homerton, Jesus, Murray Edwards, Newnham, Pembroke, St Catharine's, St John's, and Trinity Hall, have significant investments in fossil fuel companies.

All of these investments were previously obscured from view by the University's use of highly confidential companies based in tax havens, which are not usually open to public scrutiny. Investment structures being what they are, it is always possible to pass the buck to 'trusted advisors' and to claim that no 'direct' investments are being made in unethical companies. It is also easy for the University to pass the buck to the Colleges, and for individual Colleges to pass the buck to consortia, and for nobody to take responsibility for what we do with our money. I call upon the University and Colleges to adopt an ethical investment policy and to inform all of our intermediaries about its existence, so that we can pass something other than the buck to future generations.

Professor R. J. Anderson (University Council and Department of Computer Science and Technology), read by the Senior Proctor:

Deputy Vice-Chancellor, I am a member of Council, but make these remarks in a private capacity.

I am an engineer with an interest in the economics of dependability. Some years back I contributed to the design and standardization of the STS prepayment electricity meter, of which there are now 400 million in over 100 countries. An early success was enabling Nelson Mandela to deliver on his election pledge to electrify two million homes in South Africa. Whether that makes me a hero of development, or a villain of carbon emissions, is perhaps for history to judge. But energy is a subject in which I have a professional interest.

First, I am sceptical about divestment as a means of decarbonizing our electricity supply. At our scale it is unlikely to have any measurable effect. A better lobbying target for the University would be increased research budgets for solar, wind, nuclear, carbon capture, and energy conservation, while concerned citizens should also lobby for carbon taxes: they are the right policy tool, and they would cut the share prices of coal and oil companies soon enough.

Second, I am concerned about academic freedom. Cambridge has all sorts of communities with divergent views: both Israelis and Arabs, both copyright lawyers and free software writers, both privacy activists and former members of the intelligence services. We all rub along somehow and tolerate each other. I would be very concerned if the movement for boycotts, divestment, and sanctions against Israel were to gain such traction in Cambridge as to make Jewish staff and students feel uncomfortable. I would similarly be very concerned if the movement for divestment from energy companies were to undermine our colleagues in Earth Sciences and Engineering.

Third, I am concerned about practicalities. Over the lifetime of our student members we face a massive engineering challenge of not just decarbonizing the existing power grid but probably doubling its capacity to accommodate the move from internal combustion engines to electric traction, and from fossil fuels to heat pumps for space heating. Much of that work will be done by the energy companies. It will not be helpful if we make it more difficult for our colleagues to collaborate with them. And for several decades, we will continue to rely on gas; we just installed a combined heat and power station in North West Cambridge as that was the practical way of meeting energy targets.

From an engineer's viewpoint, the divestment movement holds out the prospect of few gains but potentially serious losses. I recognize that others may assess the costs and benefits differently, but before we can have a proper debate, we need the data.

This brings me to my final concern: transparency. Despite being on Council I was as surprised as anyone by the Paradise Papers' disclosure that we were investing in Shell via offshore vehicles. In my opinion, the Regent House should insist on knowing what's being done in our name and with our money. This will be a basic first step to a more informed debate.

Report of the Council, dated 20 November 2017, on building works at the ADC Theatre (*Reporter*, 6484, 2017–18, p. 140).

No remarks were made on this Report.

COLLEGE NOTICES

Elections

Murray Edwards College

Elected to a Supernumerary Fellowship from 6 November 2017:

Teije Hidde Donker, M.Sc., *Amsterdam*, M.Res., Ph.D., *EUI*

Vacancies

Christ's College: Non-Stipendiary Junior Research Fellowship in any subject; tenure: at least two years and not more than four years; closing date: 10 January 2018 at 12 noon; further details: http://www.christs.cam.ac.uk/jobs

J. H. Plumb College Lectureship and Fellowship in History; tenure: 1 September 2018 to 31 August 2022, not extendable or renewable; closing date: 29 January 2018 at 12 noon; further details: http://www.christs.cam.ac.uk/jobs

EXTERNAL NOTICES

Oxford Notices

Department of Physiology, Anatomy, and Genetics: Associate Professorship of Cardiovascular Physiology (in association with a Tutorial Fellowship in Pre-clinical Medicine at Exeter College); salary: £46,336–£62,219, plus College housing allowance of £8,628; closing date: 12 January 2018 at 12 noon; further details: https://www.ox.ac.uk/about/jobs/academic/index/ac26172j/

Associate Professorship of Neuroscience (in association with a Tutorial Fellowship in Pre-clinical Medicine at St Peter's College); salary: £46,336–£62,219, plus College housing allowance of £8,628; closing date: 12 January 2018 at 12 noon; further details: https://www.ox.ac.uk/about/jobs/academic/index/ac26173j/

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