



## General Council Meeting of 13 February 2016: Annex to Billet

THE GENERAL COUNCIL OF THE UNIVERSITY OF EDINBURGH

<b>Contents</b>	<b>Page</b>
<b>Papers for the General Council Meeting on 13 February 2016</b>	
1 Formal communications from the University Court	2
2 Report of the Academic Standing Committee	3
3 Report of the Constitutional Standing Committee	4
4 Report of the Finance and Services Standing Committee	4
5 Report of the Public Affairs Standing Committee	6
6 Meetings of the Business Committee	7
7 Deaths of members of the General Council	7
<b>Papers from the General Council Meeting on 6 June 2015</b>	
A Presentation by Dr Andy Kerr, Director of the Edinburgh Centre for Carbon Innovation	15
B Presentation of the Report of the Business Committee	25

## Papers for the General Council Meeting on 13 February 2016

### 1 Formal communications from the University Court

The following Draft Resolutions have been received:

23/2015	Foundation of a Personal Chair of Environmental Politics
24/2015	Foundation of a Personal Chair of Christian Origins
25/2015	Foundation of a Personal Chair of Economics
26/2015	Foundation of a Personal Chair of Eighteenth Century History of Art
27/2015	Foundation of a Personal Chair of Feminist and Queer Legal Studies
28/2015	Foundation of a Personal Chair of Modern History
29/2015	Foundation of a Personal Chair of Contemporary Spanish Literature
30/2015	Foundation of a Personal Chair of Financial Services Marketing and Consumption
31/2015	Foundation of a Personal Chair of Modern Social History
32/2015	Foundation of a Personal Chair of Differential Development
33/2015	Foundation of a Personal Chair of Foreign Policy
34/2015	Foundation of a Personal Chair of Ancient Greek and Iranian Studies
35/2015	Foundation of a Personal Chair of Philosophy of Science
36/2015	Foundation of a Personal Chair of Philosophy of Law
37/2015	Foundation of a Personal Chair of Philosophy of Scottish Ethnology
38/2015	Foundation of a Personal Chair of Pharmaceutical Endocrinology
39/2015	Foundation of a Personal Chair of Drug Discovery
40/2015	Foundation of a Personal Chair of Virus Pathogenesis
41/2015	Foundation of a Personal Chair of Medical Statistics
42/2015	Foundation of a Personal Chair of Immunology
43/2015	Foundation of a Personal Chair of Equine Clinical Sciences
44/2015	Foundation of a Personal Chair of Computational Biology
45/2015	Foundation of a Personal Chair of Cardiology
46/2015	Foundation of a Personal Chair of Neuropathology
47/2015	Foundation of a Personal Chair of Microbial Biotechnology
48/2015	Foundation of a Personal Chair of Microbial Science and Education
49/2015	Foundation of a Personal Chair of Geochemistry
50/2015	Foundation of a Personal Chair of Theoretical Physics
51/2015	Foundation of a Personal Chair of Systems Physiology
52/2015	Foundation of a Personal Chair of Catchment Biogeochemistry
53/2015	Foundation of a Personal Chair of Electronic Imaging
54/2015	Foundation of a Personal Chair of Theoretical Astrophysics
55/2015	Foundation of a Personal Chair of Molecular Inorganic Chemistry
56/2015	Foundation of a Personal Chair of Computational Biophysics

57/2015	Foundation of a Personal Chair of Cell Biology
58/2015	Foundation of a Personal Chair of Digital Communications and Signal Processing
59/2015	Foundation of a Personal Chair of Computational Astrophysics
60/2015	Foundation of a Personal Chair of Molecular Materials
61/2015	Foundation of a Personal Chair of Data Management on New Hardware
62/2015	Foundation of a Personal Chair of Tissue Repair and Regeneration
63/2015	Foundation of a Chair of Molecular Cancer Pathology
64/2015	Foundation of a Personal Chair of Biocatalysis
65/2015	Foundation of a Personal Chair of Global Public Health
66/2015	Foundation of a Chair of Future Infrastructure
67/2015	Foundation of a Chair of Structural Engineering
1/2016	Alteration of the title of the College of Humanities and Social Science
2/2016	Alteration of the title of the Morrison Chair of International Business
3/2016	Foundation of a Chair of Cognitive Ageing and/or Cognitive Epidemiology
4/2015	Foundation of a Personal Chair of Neurobiology

## **2 Report of the Academic Standing Committee**

for the General Council Meeting on 13 February 2016

*Convener of the Academic Standing Committee: Professor Stuart Macpherson*

The first meeting of the Committee for the 2015-2016 session was held on October 21<sup>st</sup> 2015 and at this members considered the topics to be investigated during the year. Members find it useful to meet senior student representatives at an early stage to hear of the issues concerning them and this was scheduled for our next meeting.

The Committee had heard comments on the variability in student support across the institution as well as in Teaching & Learning and as Senior Vice Principal Professor Jeffery now held overall responsibility for this it was hoped that he could attend one of our meetings. Professor Jane Norman, Vice Principal People and Culture would be invited to cover topics including Equality and Diversity training for staff and student mental health support. A fifth meeting would be to meet a Head of School. A decision on this would be taken following intelligence gained during our earlier discussions.

On November 25<sup>th</sup> 2015 we held an impressive and informative meeting with Jonny Ross-Tatum, EUSA President and Imogen Wilson, EUSA Vice-President Academic Affairs. They explained that EUSA had completed its first Strategic Plan and made this the basis of their presentation.

Following extensive consultation they had delineated five goals. These were

- 1 Students should have increased contact with EUSA.
- 2 EUSA should support a high quality academic experience for all students.
- 3 EUSA should be part of all students' everyday life.
- 4 EUSA should enable all students to develop interests that would shape their future.
- 5 EUSA should understand student priorities and respond effectively.

The priorities were 2 and 4. The former was an aspiration shared with the University and the Committee noted the several points made by the students and would raise these at their next meeting. Members were very impressed to hear that EUSA organized more than 250 student societies as well as 20 volunteering groups involving 5000 students for 7489 hours each year. In

addition there were 11 student led enterprises. Of particular relevance to General Council members was the programme of alumni mentoring linking students with individuals practicing in areas they were considering as future careers.

The Committee was delighted that Professor Jeffery was able to meet them on 20<sup>th</sup> January 2016. He explained that he had been asked to overview Learning and Teaching mainly because of concern over the University's continuing poor performance in the National Student Survey. He had designated Teaching and Learning an "unambiguous priority" for the University and accepted that equivalence had to be created between it and the other priority of Research. His themes for the work were leadership, performance, facilities, celebrating success and providing staff with enough time for both priorities. One challenge was that indicators of high performance in research were readily available and development of such pointers in teaching was urgently required. The Committee were encouraged to hear of the plans to extend the EVASYS electronic system throughout all courses. This would allow students to provide feedback on the quality of teaching more easily at the end of every course thus improving participation and ease of analysis. This information could be then used in the staff appraisal system which would also be evolved to include teaching performance as mandatory. Professor Jeffery viewed the Heads of Schools as essential individuals in the dissemination of his messages across the University. He would undertake regular meetings with this group to promote his plans and described developments in their appointment and training. The Committee were very impressed by the enthusiasm and commitment of Professor Jeffery to the improvement of Learning and Teaching and wished him well in his ambitions.

### **3 Report of the Constitutional Standing Committee**

for the General Council Meeting on 13 February 2016

*Convener of the Constitutional Standing Committee: Mr Gordon Cairns*

The Committee has not yet met since my last report but was tasked at the beginning of this term with the continued monitoring of the progress of the Higher Education Governance (Scotland) Bill.

The Scottish Government Response to the Education and Culture Committee Stage 1 report has just been published and our committee will meet to consider its terms and report our findings to the Business Committee over the next few months.

A joint meeting with our colleagues on the Public Affairs Standing Committee is being arranged to progress the updating of the information provided to those members of the General Council considering nomination to the Business Committee and to consider draft amendments provided to us by our secretary Mike Mitchell.

My personal thanks to Mike, and more especially to Mary Scott in the circumstances of her imminent retiral, for their invaluable support and assistance to me over the past year

### **4 Report of the Finance and Services Standing Committee**

for the General Council Meeting on 13 February 2016

*Convener of the Finance and Services Standing Committee: Sir Philip Mawer*

The Finance and Services Standing Committee (FSSC) has continued its work in support of the objectives identified by the Business Committee and of the wider aims of the University. Since the

last meeting of the General Council, the Committee has met on three occasions – 6 July and 5 November 2015 and 13 January 2016. We have been ably supported throughout by the Secretary of the Council, Mike Mitchell, and Assistant to the Secretary, Mary Scott.

### **6 July 2015**

This meeting was the last chaired by my predecessor as Convenor, Ms Kirsty MacGregor, to whose work on behalf of the Committee I pay warm tribute. The meeting focussed on a report from Mr Hugh Edmiston, the University's Director of Corporate Services, on the strategic challenges and opportunities which, from his perspective, face the University.

Key points to emerge included:

- The University had decided not to proceed with a merger with the Scottish Rural College but continued to work in partnership with it.
- The recently announced establishment of the Alan Turing Institute – in which Edinburgh is one of five partner HE institutions – represented a major opportunity, with potential spin-off benefits.
- The University was looking to make a step change in its engagement with industry.
- The Edinburgh Centre for Research and Innovation was a key potential contributor to that process.
- As was the Bio Quarter and the Edinburgh Investment Arm.
- A new Director of Estates and Buildings (Mr Gary Jebb) was working up an exciting 20 year strategy for the development of the University's extensive and varied estate.

In conclusion, Mr Edmiston commented that it continued to be vital for all Support Services to work in a cohesive and coordinated way across the University to:

- Engage with and motivate staff
- Deliver the Strategic Plan
- Operate within financial constraints.
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### **5 November 2015**

Our second meeting focussed on how the Committee could best support exploration of the key themes identified by the Business Committee to guide its work in 2015-16. It was agreed that, in addition to an in-depth discussion with the University's Director of Finance (see below), the Committee should also seek meetings with:

- The Chief Information Officer and Librarian – with whom it would wish to discuss inter alia the University's IT strategy and infrastructure as well as the management of IT projects.
- The Director of Estates and Buildings – to discuss the developing estates strategy and related accommodation issues.
- The Director of Human Resources – to discuss among other things how devolving HR functions to the Colleges is working and the impact of this on staff development.

The meeting also approved the General Council budget for 2015-16.

### **13 January 2016**

At this meeting the Committee discussed with the Director of Finance, Mr Philip McNaull, the Report and Accounts of the University for the financial year 2014-15. These showed that the University is in good financial shape overall but that there are a number of challenges ahead, not least in relation to expected levels of UK and Scottish Government support for research and for the HE sector generally.

Discussion identified the very considerable economic value which Edinburgh University adds to both the Scottish and UK economies, and the importance of alumni using such opportunities as

may be open to them to bring this home to Government Ministers and other relevant contacts. The meeting also touched on a wide range of related matters including:

- The importance of fee income from overseas students in the University's overall funding arrangements.
- Plans for funding essential investment in estates and buildings through carefully structured long-term borrowing.
- Changes in the University's pension liabilities and the impact of these on the University's balance sheet.
- Improvements in the way the University uses its capital assets to help facilitate its strategy.
- Improvements in the format of the Report and Accounts designed to improve transparency and give a more holistic picture of the University's performance.

The Committee expressed support for the Finance Director's efforts to sharpen financial disciplines, e.g. in relation to the return received on capital invested for growth, and to improve the Management Information available to hard-pressed academics and managers.

## **5 Report of the Public Affairs Standing Committee**

for the General Council Meeting on 13 February 2016

*Convener of the Public Affairs Standing Committee: Mr Matt McPherson*

Of all the meetings which the General Council have held this academic session, perhaps the meeting most thought provoking was when Business Committee members had an opportunity to listen to two of EUSA's sabbatical officers outline EUSA's strategic plan. The meeting struck me on two fronts. Firstly, the EUSA President and Vice President (Academic Affairs) concluded with the challenges of communication and engagement between themselves as an organisation; and their membership. Secondly, I found it uplifting that the vision of what our University should be from the most recent Edinburgh students was so similar to that vision of what our General Council hopes to achieve. It was a reminder to me of the common path we as graduates have each walked with the University, and a highlight of the work which still needs to be done.

PASC has over the past year sought to improve the student experience and strengthen the input of University graduates by focussing on several key areas which we have in turn reported to the Business Committee. The challenges facing alumni engagement continue to grow with the size of the institution. With a forecast of 50% of students being international within the near future, the critical nature of this change must be understood as much by the General Council as it is by the University, in order that our input continues to be meaningful and worthwhile. PASC has focussed on having in-depth briefings and discussions with the Development and Alumni department in order to establish our continued relevance. This has been at the core of our work over the last session.

Overseeing events continues to play a key role within the PASC's work. The guidance which PASC have offered will be a key factor in delivering future events, many of which are on track to being a guaranteed success. This includes the Half Yearly Meeting, which may well be in full swing at time of reading this article, and the Half Yearly summer meeting in London, which is taking the General Council in an exciting and bold direction.

As PASC looks to recommend a full report on the General Council's communications strategy to the Business Committee, our discussion has centered around the key question, "What is the General Council for?". Formally we are here to give graduates and others a continuing voice in the governance of this University. It may at times appear difficult to find a soundbite response to that

question, but our purpose is continually reflected in the robust representation and scrutiny that we make. It continues to be a great pleasure to Convene such a broad committee as part of that work.

## **6 Meetings of the Business Committee**

The Committee has met three times since its last Report was published, viz. 9 July 2015, 14 October 2015 and 9 December 2015.

## **7 Deaths of Members of the General Council**

The deaths of the following members of the General Council have been reported during the year from January 2015 to January 2016. Names have been listed by year of first graduation from the University of Edinburgh.

**Walker**, Letitia Anne (née Robertson), MA of 1929, died 2015

**Hutton**, William Woodman, MA of 1934, died 15/07/2015

**Fleming**, Margaret Janet Primrose (née Walker), MA of 1938, MBChB of 1941, died 2015

**McKay**, Isabella France (née Laurie), MA of 1938, died 2015

**Kerr**, Anne Baird Peat (née Hamilton), MA of 1940, died 2015

**Langton**, Margaret Sutherland Battersby, MBChB of 1940, died 13/02/2015

**Mackenzie**, Isobel Patricia, MBChB of 1940, Unknown of 1946, died 28/11/2015

**Maclean**, Mary Wallace (née Forrester), MA of 1941, died 16/09/2015

**Powell**, Herbert John, MBChB of 1941, died 08/04/2015

**Jenkins**, John Alexander, BSc of 1942, BSc of 1948, died 01/04/2015

**McKerrow**, Joan Ysobel Cuthbertson (née Clark), MA of 1942, died 21/06/2015

**Morton**, Beatrice Anne Wylie, MA of 1942, died 23/11/2015

**Sykes**, Margaret Anne Tait (née Fisher), MA of 1942, died 2015

**Thomson**, Margaret Sheila, MA of 1942, died 2015

**Cay**, Betty Morton Walker (née Third), MA of 1943, died 2015

**Robertson**, Sheila Nimmo (née Cadger), MA of 1943, died 04/10/2015

**Stone**, Walter Vernon, MA of 1943, BD of 1949, died 01/04/2015

**Urich**, Henryk MBChB of 1943, died 09/11/2015

**Gibb**, John Watson, MBChB of 1944, died 2015

**Williams**, Audrey Lilian (née Ferguson), MBChB of 1944, died 2015

**Caird**, Andrew Douglas, MBChB of 1945, died 2015

**Kaufman**, Asher Selig, BSc of 1945, BSc of 1948, died 2015

**Lovell**, Mar, Priestman (née Clark), MA of 1945, died 01/11/2015

**MacDonald**, Elisabeth Isobel, MA of 1945, died 30/11/2015

**Schofield**, Anne Dollar (née Davies), MBChB of 1945, died 09/01/2015

**Smith**, James Ogilvy, BSc of 1945, died 01/08/2015

**Coffee**, Kathleen Isobel (née Scott), MBChB of 1946, died 2015

**Humphreys**, Richard Cenric, MBChB of 1946, MD of 1953, died 01/05/2015

**Mann**, Monica Margaret (née Zealley), MBChB of 1946, died 2015

**McAllister**, Jean Ruth Williamina (née Ross), BSc of 1946, MBChB of 1947, died 2015

**Moir**, Janet Thomson, MA of 1946, died 31/01/2015

**Towse**, George Henry Hubert, BSc of 1946, died 2015

**Whiteford**, Agnes Roberta Torrance (née Eadie), BCom of 1946, died 2015

**Barr**, Margaret Nina, BSc of 1947, MBChB of 1951, died 15/11/2015

**Braithwaite**, John Robert, BSc of 1947, died 26/11/2015

**Dow**, Thomas Campbell, MBChB of 1947, died 04/07/2015

**Hopper**, Dinah Constance Milne (née Henderson), MBChB of 1947, died 12/08/2015

**Kirk**, Alexander Laurence, BSc of 1947, died 02/01/2015

**Macleod**, Hugh Murdoch, MBChB of 1947, died 23/04/2015

**Millar**, Gladys Eileen, MA of 1947, died 01/02/2015

**Podlewski**, Henryk MBChB of 1947, died 08/01/2015

**Poole**, Alexander Geoffrey Bruce, MBChB of 1947, died 01/03/2015

**Sutherland**, Anne Macgregor Souter (née Murray), MA of 1947, died 2015

**Guild**, Ivor Reginald, LLB of 1948, died 03/01/2015

**Kean**, Mary Laing (née Inglis), MA of 1948, Dip of 1949, died 08/03/2015

**Miller**, George Govan, BSc of 1948, died 2015

**Shabetai**, Estelle Regina (née Allen), MA of 1948, died 2015

**Thompson**, Rut, Constance (née Wearn), MA of 1948, died 2015

**Wallis**, Ethel Marjorie, MBChB of 1948, died 13/05/2015

**Benzie**, Robert John, PhD of 1949, died 2015

**Carmichael**, Ian Henry Buist, MA of 1949, LLB of 1951, died 2015

**Dunsire**, Andrew, MA of 1949, died 2015

**Gouldesbrough**, Christine Clephane (née Macanna), MA of 1949, died 2015

**Guthrie**, John Cuthbert, BSc of 1949, died 23/06/2015

**Kesting**, Douglas Norman, BL of 1949, died 02/09/2015

**Kilpatrick**, Robert, MBChB of 1949, MD of 1961, died 16/09/2015

**More**, Eleanor Janet (née Durrand), MBChB of 1949, Dip of 1953, died 2015

**Tennant**, Sheila Margaret, MA of 1949, died 2015

**Willis**, Maureen Constance, MA of 1949, died 2015

**Antell**, George Richard, BSc of 1950, died 2015

**Beveridge**, Robert Landles Wightman, BSc of 1950, died 15/02/2015

**Birse**, Ronald Macdonald, BSc of 1950, died 2015

**Brown**, Norman McHardy, BSc of 1950, died 2015

**Darneley**, Anne Hazel (née Jennings), BSc of 1950, died 01/09/2015

**Dawson**, Frances Doreen (née Lanny), MA of 1950, died 01/04/2015

**Dow**, William Ronald Blyth, BCom of 1950, died 2015

**Duncan**, William Falconer, BSc of 1950, died 20/01/2015

**Ewen**, Ian Duguid, BCom of 1950, BL of 1954, died 2015

**Garner**, Robert Henry, BSc of 1950, died 2015

**Grier**, Mary Elisabeth (née Martin), MA of 1950, died 04/05/2015



**Henderson**, John Donald, MA of 1950, BD of 1953, died 2015  
**Hutchison**, Andrew, BSc of 1950, died 2015  
**Millar**, John Stanley, MA of 1950, died 01/02/2015  
**Purves**, David, BSc of 1950, died 03/01/2015  
**Roberts**, Elspeth Jean (née Lindsay), BSc of 1950, died 05/11/2015  
**Smith**, Alan William McIntosh, MBChB of 1950, died 01/04/2015  
**Sweet**, Elizabeth Mary, MBChB of 1950, died 2015

**Gadsby**, Margaret, (née Stone), MA of 1951, died 15/01/2015  
**Hillary**, Clement David George, MA of 1951, LLB of 1953, died 08/06/2015  
**Irvine**, Jean Falconer (née Cobban), BCom of 1951, died 2015  
**Lees**, William Richard, MA of 1951, died 2015  
**Liston**, Andrew, MA of 1951, died 2015  
**McLeish**, William, Purves, BSc of 1951, died 14/01/2015  
**Morris**, Edna Kathleen, BSc of 1951, died 2015  
**Morrison**, Agnes Muriel (née Ewan), MA of 1951, died 2015  
**Oakenfull**, Isabella Bethune (née Heath), MBChB of 1951, died 19/01/2015  
**Shearer**, William Macdonald, BSc of 1951, MSc of 1973, died 2015  
**Stuart**, Robert Duguid, BL of 1951, died 2015

**Braidwood**, Graham Dodds, BSc of 1952, died 2015  
**Haining**, William Moncrieff, MBChB of 1952, died 2015  
**Harkness**, Marjory Currie, MA of 1952, died 2015  
**Henderson**, Annie Reid, BSc of 1952, PhD of 1974, died 30/09/2015  
**Hunter**, Hazel Woodburn, MA of 1952, died 2015  
**Johnson**, Gerald Arthur, MA of 1952, died 2015  
**MacGregor**, Duncan, MBChB of 1952, died 01/09/2015  
**Marr**, David Frederick, MA of 1952, died 17/01/2015  
**McNair**, Henry Syme, MA of 1952, MEd of 1954, died 2015  
**Miller**, Jessie Forrest (née Hannah), BL of 1952, died 29/05/2015  
**Nicholson**, Frank Charles, MA of 1952, MA of 1954, died 04/03/2015  
**Priestley**, Edgar John, MA of 1952, died 23/08/2015  
**Robinson**, Michael Kefford, MBChB of 1952, died 31/03/2015  
**Walsh**, Heather, (née Bremner), MBChB of 1952, died 07/03/2015  
**Whitelaw**, Robert Stanley, BSc of 1952, died 14/05/2015

**Doyle**, Bethi, Agnes (née Robb), MA of 1953, died 28/04/2015  
**McLauchlan**, Elise Ross Menzies, BL of 1953, died 2015  
**Paterson**, Catherine June (née Murray), BCom of 1953, died 2015  
**Pugh**, Derek Salman, MA of 1953, MSc of 1956, died 2015  
**Purdie**, David Ian, MA of 1953, LLB of 1955, died 13/04/2015  
**Robertson**, John Davie Manson, BL of 1953, died 02/11/2015  
**Scott**, Alexander Robert Crawford, BMus of 1953, died 2015

**Harper**, Alastair Douglas, MA of 1954, died 2015  
**Hodge**, Helen Ann (née Leishman), MA of 1954, died 2015  
**Hunt**, Douglas Trevor, BSc of 1954, died 01/02/2015  
**Jamieson**, John William McKenzie, BSc of 1954, PhD of 1957, died 2015  
**Macdonell**, Alasdair William, BD of 1954, died 01/04/2015

**Perry**, David John, BSc of 1954, 1955, died 05/01/2015

**Denholm**, Harold John Jolly, BL of 1955, died 2015

**Hindley**, John, BSc of 1955, PhD of 1957, died 2015

**Huckett**, Edward Charles Arthur, MBChB of 1955, died 2015

**Lamb**, Joseph Fairweather, MBChB of 1955, BSc of 1957, died 01/09/2015

**Leslie**, Kenneth George Niven, BDS of 1955, died 28/01/2015

**Magor**, Joyce Irene, MA of 1955, PhD of 1963, died 2015

**Mitcheson**, Joseph Albert Johnson, BSc of 1955, died 01/07/2015

**Paterson**, Robert Campbell Gilmour, BSc of 1955, DIP of 1971, died 02/04/2015

**Pringle**, Craig Robertson, PhD of 1955, died 04/12/2015

**Watt**, Robert James Gordon, LLB of 1955, died 2015

**Griffiths**, Paul Herbert Marshall, BSc of 1956, died 2015

**Wood**, Sheena Margaret (née Cook), MA of 1956, died 20/01/2015

**Hardie**, Ann Anderson (née Renwick), MA of 1957, died 24/02/2015

**McInnes**, Jean Robertson (née Kilgour), BDS of 1957, died 16/11/2015

**Sim**, Craigen, BSc of 1957, died 2015

**Slavin**, Brenda Mary (née Stewart), MBChB of 1957, died 2015

**Beveridge**, Sandra Margaret Moncrieff (née Watson), MA of 1958, died 01/07/2015

**Owen**, Robert James, MA of 1958, died 2015

**Ransford**, Tessa Mary, MA of 1958, died 2015

**Robertshaw**, Denise Elizabeth, MBChB of 1958, died 2015

**Wijeratne**, Warusahennedige, Vernon Soysa, PhD of 1958, died 2015

**Andrew**, John, MA of 1959, BD of 1961, died 2015

**Barr**, David George Dryburgh, MBChB of 1959, died 2015

**Dell**, Murray, John, MBChB of 1959, Dip of 1962, died 11/04/2015

**Macdonald**, Angus, MBChB of 1959, died 01/02/2015

**Reid**, Ian William, BSc of 1959, died 2015

**Dunnet**, David Brown Bruce, BDS of 1960, died 2015

**Lewis**, Derek, MBChB of 1960, died 2015

**Mason**, Ewan McLaren, BDS of 1960, died 2015

**Morgan**, Lyndon Rees, MBChB of 1960, died 15/01/2015

**Munro**, John Forbes, MBChB of 1960, died 2015

**Wishart**, Jack Gillespie, BSc of 1960, died 2015

**Wyllie**, James Alexander, BSc of 1960, died 2015

**Andic**, Fuat Metin, PhD of 1961, died 20/01/2015

**Bell**, Alastair Findlay, BVMS of 1961, died 22/08/2015

**Bowie**, William Robertson Belfitt, BSc of 1961, died 2015

**Cadoux**, Aldyth Midgley, MA of 1961, died 14/09/2015

**Coldron**, James Edward, BDS of 1961, died 01/02/2015

**Dawson**, John, BSc of 1961, died 29/09/2015

**Heaney**, Bridget Jane (née Wilkinson), BDS of 1961, died 18/04/2015

**Heward**, Christine Mary (née Woods), MA of 1961, died 2015

**Lynn**, Martin Hargreaves, BSc of 1961, died 2015  
**MacDermott**, Robert William Johnston, BD of 1961, died 20/03/2015  
**Mercer**, William, BDS of 1961, died 2015  
**Mitchell**, George Willoughby, BDS of 1961, died 2015

**Das Gupta**, Dilip Kumar, PhD of 1962, died 2015  
**Greig**, Robert Fraser Bentinck, MA of 1962, died 2015  
**Prosser**, William David, LLB of 1962, died 2015  
**Roe**, Fiona Elizabeth Susan (née Greig), MA of 1962, died 2015

**Anderson**, Alexander George, MA of 1963, died 2015  
**Kennedy**, Christopher John, BSc of 1963, died 01/07/2015  
**Latham**, Christopher William, MA of 1963, died 2015  
**Leslie**, Robert Semple Everett, BSc of 1963, died 2015  
**Ritchie**, John Patrick, BSc of 1963, PhD of 1966, died 2015  
**Thomson**, Derek Spence, MA of 1963, died 2015  
**Wallace**, Richard James Callon, MBChB of 1963, died 2015

**Bruce**, William, BL of 1964, died 2015  
**Burt**, Patricia Elizabeth (née Ramsay), LLB of 1964, died 2015  
**Cameron**, James, MA of 1964, died 2015  
**Foggie**, David Scott, LLB of 1964, died 2015  
**Frost**, David Arthur, BDS of 1964, died 2015  
**Galloway**, Brian, BSc of 1964, Dip of 1965, died 12/05/2015  
**Lockie**, Andrew Cameron Knight, BSc of 1964, MBChB of 1966, died 2015  
**Musgrave**, Clarence William, BD of 1964, died 2015

**Clow**, William, MBChB of 1965, died 2015  
**Dorman**, Thomas Alfred, MBChB of 1965, died 2015  
**Kay**, Adah Zephyra (née Nathani), MA of 1965, died 2015  
**Macdonald**, Donald Davidson, MA of 1965, died 2015  
**McCluskey**, Christopher Joseph, MBChB of 1965, died 2015  
**Scholes**, Neville Edward, MBChB of 1965, died 2015  
**Unsworth**, Elisabeth Anne (née Hurdle), BSc of 1965, died 01/03/2015  
**Watt**, Brian, MBChB of 1965, MD of 1972, died 2015  
**Waugh**, Doreen Jennifer (née Laurenson), MA of 1965, PhD of 1985, died 2015

**Bain**, George David Preston, LLB of 1966, died 2015  
**Carr**, John Joseph, BDS of 1966, died 01/05/2015  
**Gordon**, Robert Leven, BSc of 1966, died 2015  
**Johnson**, Arthur Russell, BMus of 1966, died 2015  
**McFadzean**, Robert Malcolm, MBChB of 1966, died 11/01/2015  
**Mcintyre**, Charles Allan, BSc of 1966, died 2015  
**Roberts**, Ifor John Wynn, MBChB of 1966, died 2015  
**Sawers**, Robert Stewart, BSc of 1966, MBChB of 1969, died 2015  
**Tresser**, David, BSc of 1966, died 2015

**Macha**, Augustine Moses, BVMS of 1967, died 2015  
**Ross**, Christopher John, MA of 1967, died 2015

**Arbon**, James Stanley, BSc of 1968, died 01/04/2015  
**Murray**, George Sinclair, BSc of 1968, MBChB of 1971, died 2015  
**Wilson**, David Alan, BSc of 1968, died 2015

**Archbold**, Muriel Margaret Helen (née Ballantyne), BSc of 1969, died 2015  
**Archibald**, Iain Campbell, MA of 1969, died 29/01/2015  
**Gunn**, John Robert, BSc of 1969, died 2015  
**Lang**, Brian Gill, PhD of 1969, died 2015  
**Miller**, John King, LLB of 1969, died 2015  
**Montgomer**, Archibald, Eric William Wallace, LLB of 1969, died 2015  
**Moore**, Jane Carol (née Maynard), MA of 1969, died 2015  
**Papanicolaou**, Angelo, PhD of 1969, died 2015

**Dallmeyer**, Gavin Richard James, BSc of 1970, 1971, died 2015  
**Duncan**, George, MA of 1970, died 2015  
**Ferguson**, John Bell, BSc of 1970, MBChB of 1973, died 2015  
**Fletcher**, Geoffrey Martin, BSc of 1970, PhD of 1975, died 2015  
**Moss**, Elizabeth Marie (née Tonkin), MA of 1970, died 2015  
**Myles**, Thomas, LLB of 1970, died 2015

**Chill**, Robert Desmond Oliphant, LLB of 1971, died 2015  
**Hibbert**, Edgar Philip, PhD of 1971, died 2015  
**Kerr Smith**, Jennifer, (née England-Kerr), MA of 1971, died 2015  
**Palmer**, Ian Campbell, MA of 1971, died 2015  
**Pullar**, Ian Alexander, PhD of 1971, died 2015

**Bailie**, Henry David, BVMS of 1972, died 20/08/2015  
**Chisholm**, Patricia Marie, BSc of 1972, PhD of 1978, died 05/06/2015  
**Easter**, Hedley John, BSc of 1972, MBChB of 1975, died 2015  
**Hipkins**, Stephen William, BVMS of 1972, died 2015

**Amos**, William Macgregor Grahame, MSc of 1973, died 2015  
**Cowan**, Catherine Ann (née Murray), BSc of 1973, MBChB of 1976, died 2015  
**Lye**, Alan Andrew Simpson, BSc of 1973, died 2015  
**Miller**, Frances Linda Jane, BMus of 1973, died 2015

**Blacklay**, Richard Anthony, BAr of 1974, died 2015  
**Fernie**, Douglas Petrie, BSc of 1974, PhD of 1980, died 11/10/2015  
**Watters**, John Tweddle, BSc of 1974, MBChB of 1977, died 2015  
**Zahno**, Kamila Margaret (née Wickens), MA of 1974, died 2015

**Dassanayake**, Lincoln, PhD of 1975, died 13/07/2015  
**Mackay**, Barrington Reay, MA of 1975, died 2015  
**McClatchey**, John, BSc of 1975, died 30/04/2015  
**Pitcairn**, Ian Sturrock, BCom of 1975, died 2015

**Armstrong**, Ian Ross, BSc of 1976, MBChB of 1979, died 2015  
**Cleghorn**, Cheryl Bridget (née Burnett), BDS of 1976, died 2015

**Edwards**, Samuel Frederick, Hon DSc of 1976, died 01/05/2015  
**Forshaw**, Hugh Alistair, BVMS of 1976, died 05/01/2015  
**Harris**, Henry Hon DSc M of 1976, died 2015  
**Pryde**, Brian Andrew, BDS of 1976, died 2015  
**Williamson**, Fraser Kennedy, BSc of 1976, died 18/09/2015

**Fergusson**, Stuart Lumsden, BSc of 1977, died 01/04/2015  
**Hepburn**, Catherine Anne, BA of 1977, BD of 1979, died 2015  
**Livingstone**, Charles Edward, BSc of 1977, died 2015  
**Rae**, Sheila Renfrew Overton, BA of 1977, died 2015

**Blaney**, David Daniel, BSc of 1978, MBChB of 1981, died 2015  
**Porteous**, David Thomson, BVMS of 1978, died 01/05/2015

**Stoker**, Frances Mary (née Pickersgill), MSc of 1979, died 2015

**Sutcliffe**, Agnes Jean, MSc of 1981, died 2015  
**Von Romberg**, Margaret Kerr, PhD of 1981, died 2015

**Gallagher**, John Joseph, BSc of 1982, died 2015  
**Karling**, Robert John, MA of 1982, died 24/05/2015  
**McGregor**, Moira, LLB of 1982, died 12/11/2015  
**Pakarian**, Ali Asghar, PhD of 1982, died 27/02/2015

**Burns**, Susan Helen (née Ward), BSc of 1984, died 2015

**Sorooshian**, Shahpoor Scott, MBChB of 1986, died 2015

**Porteous**, Graeme Alan, BSc of 1988, died 2015

**Jarrett**, William Fleming, Hon DVM&S of 1989, died 2015

**Fraser**, Donald James, LLB of 1990, died 2015

**Crawford**, Stephen, MA of 1992, died 2015  
**Godden**, Richard Livingstone, BSc of 1992, died 2015  
**Wheeler**, Elda, MA of 1992, died 2015

**Gray**, Beverly Elaine, MBA of 1993, died 2015

**Williamson**, Edward Frank Richard, BCom of 1994, died 02/01/2015

**Corneck**, Warrington Graham, MTh of 1995, died 13/03/2015  
**Ho**, Yoke Peng, Hon DLetters of 1995, died 2015

**Baird**, Lorraine Marion, BA(H) of 1999, died 2015  
**Yeomans**, Lee Joseph, MA(H) of 1999, died 2015

**Millar**, David Mitchell, LLB of 2000, died 2015

**Wren**, Paul Bryan, PhD of 2000, died 2015

**Poole**, Thomas Richard, BSC(H) of 2001, died 2015

**Moore**, David Simon, BED(H) of 2002, died 2015

**Lowden**, Peter Richard, MA(H) of 2004, died 2015

**Fenwick**, Robert Allan, PhD of 2007, died 2015

**Amiel**, Jack Barry, BSC(H) of 2011, died 2015

**Bailey**, Kirsty, MSC of 2012, died 06/09/2015

**Ebsworth**, Evely, A V, Hon DSc of 2013, died 2015

**Cowan**, Norman, MA(H) of 2014, died 13/02/2015

**Carnall**, Geoffrey Douglas, died 20/02/2015

**Collins**, Jeffrey Hamilton, died 01/10/2015

**Cowley**, Roger Arthur, died 2015

**Davies**, Alan, died 27/09/2015

## Papers from the General Council Meeting on 6 June 2015

### **A Presentation by Dr Andy Kerr, Director of the Edinburgh Centre for Carbon**

at the General Council Meeting on 6 June 2015

First of all can I also offer you all my very warm welcome to this building. It is a fabulous place to work and we are very fortunate to have it. I will talk a little bit more about it later on in my talk, but if anyone does want to have a look around afterwards I am very happy to show them and tell them some of the fascinating and historical stories behind the buildings.

I am going to begin with a very short story about innovation, because what I want to talk to you about is innovation and impact, so I am going to give you a little short apocryphal story about innovation and I am then going to talk a little bit about energy and global energy trends, because this is one of the great challenges we have around the world at the moment. I am then going to ask the question 'What should the University be doing about this? How should the University best tackle, support, frame some of these problems?' Then I will explain what we are trying to do within ECCI, within the Edinburgh Centre for Carbon Innovation.

But just to get you thinking about innovation. Let me start with a short apocryphal tale. For those with a good memory, 50 years ago last Thursday was the first day a human being walked in space, outside a space craft, in orbit. I think his name was Ed White, but it was a milestone, it was part of basically the space race, which was this desire to put a human being on the moon. And the characterisation of the space race was very much about political ambition, it was very much absolute cutting edge science and technology, and indeed quite a lot of individual bravery as well. Through this process one of the defining features was an attempt to capture all the bases, in other words to make sure that they had checked and tried to undertake and risk manage every aspect of that whole science programme and the space programme. One of the things that came up was how do you write with pens in space, because pens need gravity to drive the ink down to write, so the question was how do you write with pens in space. Now in this little apocryphal tale NASA spent hundreds of thousands of dollars trying to work out how you write with pens in space, and they were really struggling. A couple of years in there was a meeting with the Russians and of course there was great competition with the Russians at the time and an American leaned across to one of the Russians and said 'Well, have you solved the space pen problem?' and the Russian snickered a bit, of course we have solved the problem of pens in space, and the American leaned across and said 'How did you achieve it?', and the Russian leaned across and said, 'We use pencils'.

It is not an entirely true story, but the beauty of that story is that innovation is about making things work. It is about making things actually happen, and there is a tendency, and we all do it, to like elegant solutions. We like things that are beautifully made and beautifully elegant that deliver outcomes, but often in reality things are messy, the question is what works in practice at the time and that is the thing that we want to be focussing on. I just want you to keep that in mind when we talk about some of these issues with energy. Because, if you look at some of the great energy challenges, then energy is one of the great if you like challenges for the 21<sup>st</sup> Century; having accessible, cheap, readily available energy is an absolutely critical issue for any modern society.

You cannot run a modern society without it. So governments tend to get involved in this, and anyone who has been involved in governance around energy will appreciate what they call trilemma. These are generally mutually exclusive. You cannot typically have all three very easily. Energy security; in other words, can you keep the lights on, can you ensure that there is readily available energy when we need it. Sustainability; whether it is air pollution in cities in Asia or Latin America, or it is greenhouse gas emissions, how do we try and decarbonise, how do we try to reduce the external impact that using our energy actually has. And the third one, around equity or affordability; can we keep the price down. Typically, certainly in places like the UK, we have tended to try and match this, and we have been able to do two of the three, but it is very difficult to deliver all three.

If you look globally you also tend to find two other things that come up, one around just energy access and one around economic growth. The access one because over a billion people still do not have access to electricity today, out of a population of just over seven billion. 2.6 billion people still cook with dirty fuels, in other words that have a direct impact on their health. So actually having clean, accessible energy is still a challenge for nearly a third of the population of the world today. Energy is a huge infrastructure and is a huge business, so just in terms of reshaping energy means a great deal around economic growth. Within the UK we imported fossil fuels to the tune of about £50 billion last year, so the drop in oil price has a direct impact on economic growth within the UK, Europe and elsewhere. These are the sorts of issues that governments think about when it comes to energy. And yet what we see, certainly in the main three of the trilemma is radical simultaneous changes going on around the world in all three at the moment. It is a very, very turbulent time for energy and energy systems.

So let me just talk through two or three of these. I am going to touch first of all on energy security. You won't be able to see the detail on these graphs, don't worry about that. I am going to start up here, all you need to look at is this black line. This is the demand for LNG (liquefied natural gas). Gas has typically been a regional market; you supply it locally, so prices vary dramatically around the world. What we have seen is an explosion of the growth of supply of LNG around the world, huge terminals being built in Asia and Europe to enable us to move gas around the world. What that has done is start to create a global commodity in gas, which has changed the whole notion about energy security. At the same time you see huge growth in the US around shale gas, extraordinary technical innovations going on there to allow us to take gas out of really quite difficult rocks that gas exists in, shale rocks, and we are seeing a massive growth in shale oil and shale gas.

At the same time, this is the global crude oil price, the Brent price, which drove along at a 100 and then dropped to 50-60 last year, so you are seeing major changes, structural changes in the market. Now this last one is because the Saudis are pumping like mad at the same time as the US are not importing as much, there is lots of oil around in the market. But it is also worth thinking about the prices here. When I first started in government policy-making around energy, back in the 1990s a paper was written called Energy Paper 68, and it was written by the Government analysts in London in UK, but it drew on the best industrial expertise at the time, and it was trying to forecast greenhouse gas emissions, energy prices for 20 years from 2000 to 2020. Of course to do that they had to guesstimate what the high and the low prices would be for different commodities. For oil they set the low price at \$10 a barrel. What do you think they set the high price as being, 1999 for 20 years, they looked at 20 years and said, what is the possible highest price oil could get to? \$60, no, it was \$20! Then they had a high, high price, which was 'we can't possibly believe it could be any higher than that', and it was \$30. What does that tell us? It tells us



that we are useless at forecasting energy prices, so we shouldn't try. But it does matter, because what we are seeing is global structural shifts around energy markets.

At the same time we are seeing massive investments going into renewables around the world. This is renewable electricity investments; the red is Asia Pacific, so China and East Asia in particular, the blue is North America and the green is Europe, and Europe basically drove this through in the first years of this century. But since then China and East Asia have taken over, so they are by far the biggest investor in renewables. China is the single biggest investor country in renewables, the US is second. It is worth saying that what this means is amazing capacity changes, China are putting on more renewables in any one year than are on the entire UK grid. They have more wind capacity at 115 odd gigawatts than our entire grid. There are huge changes taking place in different parts of the world. And what we are seeing is this capacity growth. So these are guesses as to what the industry would do, the grey one was an estimate from the International Energy Agency in 2000, the green and blue in 2006, and the actual is red, that is what we are doing, so we are actually at the upper end of any expectation for installed wind capacity. For solar, the expectation was that it would grow at this sort of rate, and what we have seen is this exponential growth of solar. And as part of this what we have seen is radical price drops within solar, so the price of a solar panel has dropped by 80% in the last five years. Increasingly we are seeing renewables which are cost competitive directly with coal or gas, certainly more cost competitive, in other words cheaper, than using diesel for electricity generation. I am always slightly weary about talking about cost-competitive because you are always talking about apples and oranges. Something that is high capital cost and no running costs, which is intermittent like solar or wind isn't the same as having fixed dispatchable generation like a gas plant, but we are getting to the point where the prices are getting very similar.

What we are seeing around the world are renewable investments now overtaking fossil fuel investments. So this is fossil fuel investment around the world, the last year, 2013, it was \$141 US billion invested in fossil fuels. 2013 was the first year that renewables overtook fossil fuel investments. The current expected build rate over 2015/2020/2025/2030 is like that, and the fossil fuel build rate is going down like that. We are seeing a complete restructuring of energy supply around the world at the moment. And what we are expecting off the back of that, the world, OECD, non- OECD, is this pull back of coal, of oil, of gas, and increasingly more renewables, nuclear, and so on taking over. So at the end you are seeing this restructuring taking place around the world.

The other thing that is taking place, and in particular in Latin America, in Asia, are issues around local air pollution, and I will buy anybody a drink who can actually name these five great world cities that I am going to show you now. This is driving a lot of political activity. The cause of this is partly coal burn close to cities, but mostly it is vehicles burning diesel or petrol. So we are starting to see again cities starting to take really quite radical action to try to reduce air pollution. So the question is then, how does the city improve its mobility to allow people to move within and between cities without ending up with this type of environment. And what we are seeing is what has been termed intelligent mobility, we are talking about a lot of different approaches about how we manage energy, how we manage waste within cities, how we manage water, and particularly around transport systems to try to make transport systems more effective, but also less polluting. So these are the sorts of things that are driving a huge amount of change around the world.

So what should the University be doing to face this? From my perspective the University, we have already heard, is a top-ranking research university, we would expect it to be doing good research.

We would expect it to be doing good teaching, but the question is what more could it do, should it do? And I would argue actually that Edinburgh, has extraordinary reach with its current students; I was out in Hong Kong with the University, because we are opening up offices out there, and I will be talking more about that in a moment, and I was hearing comments like there are more Chinese students in Edinburgh than in Oxford and Cambridge combined. There are more in Edinburgh than the entire Ivy League combined. I'm not sure if it is the biggest or one of the biggest recipients of American students in the UK. We have an extraordinary reach for students. So if we have this reach with alumni we have hugely talented researchers and we have hugely talented teachers, what should we be doing more?

I would draw attention, again don't worry about the detail, to the Strategic Goals of the University, because we have got excellence in education, we have got excellence in research, and we have got excellence in innovation, and that is the one that interests me more than anything else. So again, given that you are alumni of the University, can you tell me what are the targets in 2012/2016 Strategic Plan for the University in innovation, the key performance indicators, the KPIs, anybody know what they are? These are the objectives that have been set stimulating innovation, seeking out novel applications, identifying the best means of turning ideas into commercial reality, consolidating our reputation as a partner of choice for commercialisation, and so on and so forth. A lot of them are about commercialising, and we are very, very good as a university at spinning out, spinning out ideas, licences, IP and companies, we are very good at that. But actually what the KPIs are is largely around numbers of disclosures, patents, new company formations, that is their key performance indicators, and their target is basically adding economic impact and public policy. But I would challenge the University here, because I think the University can do more than that. If we want to be a top ten global university, and I think we do. We certainly have the talent to do that. Then actually it is not just about pushing stuff out into society, it should be also about shaping some of these conversations. It should be actually about directing how we can take a positive approach around the world. So for me excellence and innovation needs to be more than simply can we spin out companies, it should be about how can we actually drive conversations with public policy, with cultural change, with social change, within our local city, within Edinburgh, within the UK, within Scotland and globally. That is where we should be aiming. We should be aiming very, very high, and to do that we need to recognise a couple of things. One is we do not have all the answers ourselves, no one institution, no one country, no one discipline certainly has all the answers. So we have to break down some of these barriers between University and schools, we have to break down barriers between the University and the public sector, local authority, the private sector, and we have to break down barriers that allow us to start putting together and start pulling through some of these ideas so that we can shape the public discourse around some of these challenges.

That is what I have really been tasked with trying to do within the Edinburgh Centre for Carbon Innovation, that is what we have been trying to do over the last four and a half years, since I was appointed. We have really got three strands here, one of which is public policy, so essentially we provide the main interface between the Scottish Government and the entire research sector around climate change and the low carbon transition. In other words it is not just Edinburgh, we are also acting as a broker for knowledge with other universities as well. Now in fact, because Edinburgh is such a big university it is an elephant in the room, often we will come back to Edinburgh, but not necessarily, it depends on who has the best knowledge, expertise, and so on. So knowledge exchange is then a primary way for the Scottish Government to ensure that as it writes its new regulations, its new policies that it is being informed by the best available evidence, the best evidence across the piece.

There is a huge bit of work on business innovation. Some of that is about working with local companies to help them develop new products and services, some of that is about catalysing projects like Smart Cities to make them happen. And then the other thing we have, which is a step ahead of a lot of other people, we have this magnificent building. On the top floor we incubate companies, pre-commercial companies, and we mix them in the same place that we have Masters students. So the Masters students are listening to the theory while they are here for the year, but they are also mixing with people who are actively developing their businesses, and they love it. They are seeing what they are thinking about and the theory, being put into practice.

On our middle floor we host different corporates, businesses, social enterprises, that are involved in this space, and that is everything from the Royal Bank of Scotland's sustainability team who have a desk there, through to a social enterprise that helps community energy. Because it is about understanding that there is an opportunity of pulling people together and actually having those conversations. Not just from the academic down, it's not just a knowledge transfer from us to them, it is about having 'us' around a table and actually shaping and taking those conversations forward. But often the advantage comes from the conversations in the margin.

The third thing we do is around skill for learning, so a lot of capacity-building work. We have been doing a lot in China, for example helping to support their public policy development through something called the NDRC, the National Development Reform Committee. We are doing a lot of work here with different groups. There is a huge area and what we are doing is trying to take Masters courses, compress them into short accessible courses online, face-to-face courses, which anybody from a business, from a social enterprise, from a government can then access, so they can get access into this knowledge base.

As I said, finally we have this hub, and what we try to do is to build essentially a national hub so that if you want to have a conversation about energy, low carbon, you are going to have it here as much as anywhere else in the country. We host events and activities, some we put on ourselves, some other people host here. We are getting about 1,200 people a month coming through to different events and activities, which could be a company launching a new product or service, it could be a social enterprise, as we had last week pitching to the community for essentially crowd sourcing, bringing in money from the community to buy renewable energy sources. So there is a whole range of things going on here. The whole building has been arranged with the ideas at the top, with Masters students and the entrepreneurs, the resident businesses and social enterprises on the middle floor, and this whole ground floor being here for activities, for teaching, for conferences and for executive education. It has been a huge success. We have become within a couple of years a national hub.

So the question is 'What happens next?' Well we think internationally, it is all very well doing well in Scotland, Scotland has taken on really challenging targets, it is going to miss another target next week, but we are actually ahead of the game compared with many in Europe. But actually the real challenge, if you are interested in influencing globally is to say 'Where are the big emitters? It's in China. So we are going to be opening offices in Hong Kong in a couple of months' time to really take this model and start building this model in Hong Kong and southern China. So it is about trying to influence, as I said, trying to shape that conversation going forward. And to me, within the University, I have talked a bit about energy and carbon, but within the University we have real talent, whether it is about global health, whether it is about data informatics, whether it is about governance, we have some real talent we could develop into these types of impact hubs, that can

then be influential right the way around the world. It is more than just research, it is more than about teaching, it is about making a stamp on the world to say that we can make a difference, a positive difference, by having this very open hub-like approach to trying to solve problems.

Just to finish off, from where I sit, I see such an opportunity for the University over the next few years in not just doing research and teaching, but also being a convener. It has a huge power to convene things, whether it is with the local city authorities, or whether it is with global players, whether it is the corporate or public sector. It is an honest broker, it can be seen to be taking a step, because it is actually very good not to have a corporate back behind you, you can be an honest broker in this place. We can support a lot of this, whether it is policy, business innovation, entrepreneurship, some of that will be coming out of Edinburgh, but some of it is actually just good to have a hub which just attracts people in. We have had businesses coming in here, in fact a couple of businesses from the States that have wanted to come and set up in Scotland, and they want to be in these hubs, so they are actually a part of these conversations going on. We obviously need research that is tailored to end users, and we also have a huge opportunity as a university to much better share good practice.

None of us, Scotland, UK, whoever, does not have all the answers, and one of the experiences we are finding working within China, or working in Latin America, is actually some solutions are fantastic and we can bring them straight back and apply them here. Equally, they are interested in what we are doing and we can take that over there. That whole notion of how we share things more effectively around the world is key. I think from the University's perspective, over the next few years that third pillar, excellence and innovation, we can develop that hugely. To date it has been focussed on can we commercialise companies, and we are good at that, and we want to continue doing that, but we can actually do a whole lot more. Now with that I will leave it there. Thank you for listening.

**Chairman:** Thank you very much Dr Kerr. Would you like to stay there, and could I invite questions from the floor and indeed there may be some online. Could I please just remind those asking questions to speak on the microphone, with their name, degree and year of graduation? The floor is open.

**Dr Alan Brown:** A superb talk, thank you very much. You mentioned that this is a national hub, you briefly mentioned nuclear power, shale gas, without getting too political, is there not a problem with the Scottish Government which has set its face against nuclear energy and is stalling development of shale gas production.

**Dr Andy Kerr:** How to do this without being political? I think the first thing to say about the electricity system in Scotland is that it is part of the GB system, we are not separate from the rest of the GB system, so we have to be careful about treating it as if we are a separate island that does not have big inter-connectors. So what is happening in Scotland, which is a radical growth in renewables for example, and obviously the shutting down of the coal fire generation at Cockenzie, and Longannet next year, is part of a wider GB system, so from that perspective the nuclear question, to me, is less of an issue. What the Government is doing is trying to extend the lives of Hunterston and Torness, the two nuclear power stations as long as possible, because they see actually for the next five to ten years they are needed. Beyond that their argument would be actually, with local energy generation, not just renewables, but with local energy generation you can get to the point where you do not need those nuclear power stations. You still need a GB system with big inter-connectors which are being built at the moment between the Scottish

system and the English and Welsh systems, and indeed the Irish system as well. I think I am less worried about the nuclear question, if there is a particular issue with nuclear it is simply the cost. If you are paying a vast amount of money guaranteeing it for 35 years, that doesn't make much sense to me, so I have a problem with the cost, rather than the principle.

On shale, they have been very careful in Scotland not to rule it out completely, and the reason for that is that Ineos, who run Grangemouth, have got a fifteen year deal to bring in American shale gas. The question is, what happens when that deal runs out and what Ineos want is to be able to use local gas, and so the Scottish Government are aware of the challenges, and they are very keen to make sure that there is a proper evidence base to ensure that when it is exploited it will be exploited safely. That is the process we are going through at the moment, can we find and develop the evidence base, and that is certainly something that the University of Edinburgh, particularly in GeoSciences, is heavily involved in, because they actually have a lot of the skill-sets needed to ensure that we have a good, rigorous, analytical base for this.

The other thing that is happening in Scotland, which is different from Southern England, is that the experience of dealing with wind farms in Scotland and in particular the need for communities to be much, much more closely engaged in order to allow wind farms to develop, we are trying, and this is something that we do here as well, trying to apply some of the learning from that into this contentious shale gas issue. So I think there is a sense that we can take social science learning, we can take our scientific learning, and actually help to manage that contentious issue in a way that benefits Scotland in the medium term. So, I could talk more, but just to give you a sense that nuclear I am less worried about in Scotland, I think with shale gas my worry is we are going down a route where people with no evidence are making very strong assertions about how dangerous it is, and that is not backed up by the evidence and the question then is how do you have a serious conversation with the local communities who will be those who will be most affected to ensure that they benefit if and when it is exploited.

**John Clifford:** Thank you very much for your really illuminating exposition, I think it is fantastic that the University is so advanced in these matters. There is just one issue which seems to be missing generally from the analysis and discussion, and it is something where Britain is most certainly not leading, and that is reduction in consumption. Now if we think about reduction in consumption and what that could really mean, it could have impact on the point raised by Alan Brown. If we think that we at the moment are predicating our work on a certain expansion of need, we could actually look at reduction. There is just one point I would mention, for example, Germany was attacked by the UK for not signing up to a 15% reduction in energy consumption over a certain period of time. What the British Government did not realise is, that Germany like Austria, and other European countries had already done all the easy stuff, and are now getting to the difficult stuff. And it was said that the UK had not even begun to tackle the easy stuff, which means, therefore, that if we were to actually find a way to reduce consumption, wasteful consumption, one could even hazard a guess and say two years 50%, something really quite drastic in a city like Edinburgh, then we might actually find that we could open the way to even better innovation.

**Dr Andy Kerr:** The answer to that is, absolutely. I didn't talk a lot about it, I didn't talk at all about it, but it is something that we are very much involved in. Certainly when we talk about sustainable cities or sustainable islands a lot of the projects we are involved in are actually not just about how you generate the energy, but actually how you can reduce the wastage, because we are phenomenally wasteful as a species of our energy. I was involved in the Fossil Fuel Review Group, and one of the things we did look at was the losses through the system across the whole supply

chain of energy from when the fuels are dug out of the ground to how much useful energy is provided as a service to people, and it is quite an extraordinary set of losses, and it is one of the reasons why one of our recommendations to the University was then to try to not just focus on those who pull stuff out of the ground, but how do we engage with companies throughout that supply chain of energy. So I would absolutely agree that there is pressing need for that. The way it is being done here in Scotland is to focus much more on local energy systems, so that you start to look much more closely at what are the energy needs locally, whether it is mobility, heating, cooling, electricity, and start to understand what can deliver that locally, and efficiency or demand management is a key part of that, so I couldn't agree more.

**John Clifford:** Just very briefly, on this question of reduction in consumption, it is not just about loss and wastage, but unfortunately economies that are obsessed with growth can't bear to think about the notion of reduction, and here we are surrounded by moon energy, one of the riches of Scotland, and yet we are not really even grappling with that and we are not actually considering seriously reduction in consumption, and I think with respect you didn't not really answer that question in your answer.

**Dr Andy Kerr:** Okay, let me say from a Scottish perspective what Scotland has done. It has a target to reduce total energy demand that is the entire energy demand within the country by 12% by 2020. It is at about 9% now, so in other words we are starting to see total energy demand coming down, and that is driven largely by much, much more efficient housing, so that we are actually using less energy in the first place, so it is actually trying to drive down the amount of energy we require.

**Brian Smith:** I thought that was absolutely superb, so thank you very much indeed. You spoke about work going on in Scotland, our links with the States, our links with China, and you alluded to South America and Latin America. Can you tell me whether we are doing anything in relation to Africa? Because in Africa clearly there is not a shortage of solar energy, and there are obviously demands for high energy involved in desalination and things like that, are we involved in the African Sub-Continent, or are we simply concerning ourselves with where there is a reasonable prosperity, such as in China and the States.

**Dr Andy Kerr:** We at ECCI are not working in Africa at the moment. I would like to and we have been exploring some opportunities both in East Africa and West Africa, but we don't yet. In time, but not just yet. Certainly within the University there is a great deal of work on energy systems within different parts of Africa, whether you are talking about some of the issues that are going on in South Africa, where you have got a very ropey grid, and actually there are lots of opportunities for local energy generation, or you are talking about some of the issues in East Africa, around health and access to energy, so there is a great deal of work going on, but we don't ourselves do that work yet.

**Aaron Fuller:** You have touched on this point talking about consumption and efficiency, how are we doing as a species in terms of the change in carbon input to GDP output, and are we seeing a similar sort of trend that you would have seen with bronze and steel, as we develop we need less of the input unit to produce the economic growth?

**Dr Andy Kerr:** Both globally and in Scotland, in Scotland we are certainly seeing more GDP output per carbon emission. So in other words that trend is in the right direction, it is not as fast as it should be, but it is in the right direction. At a global level we had a challenge for years through

what you might term energy efficiency measures, we were finding we were producing more per unit of energy and more per unit of carbon, until about the year 2000, and then we had a huge dash for coal-fired power generation in Asia, so actually that trend was reversed for about ten years and it is now just changing again. It is going back onto the right track now, but for about ten years it was going the wrong way, and that was only because there was a big dash for coal-fired generation. What is interesting though is, the pictures I showed of the air pollution is actually the thing that is starting to drive a lot of changes, so a lot of old coal-fired generation in China is just being shut down, and being China they just say, 'You are going to stop next year, it doesn't matter what. Doesn't matter what costs you have got, it has to stop.' And they are trying to replace them with much, much more efficient coal-fired generation, or renewables, or nuclear. So in that sense they are going back onto the right track, but for a few years it went the wrong way.

**David Houston:** So I can see this question from two points of view, but thank you very much for a fantastic talk. I particularly liked the energy trilemma thing, it appealed to my scientific background. It helps me frame this question, because I don't hear much talked about energy security, which I think is a very important aspect in that triangle. For example, I do remember quite a few years ago a catastrophic set of power cuts in the United States that caused chaos then, and now of course we are so dependent on the internet, and of course our hospitals are all geared up with technology, that kind of thing, the actual consequence of an unplanned power-cut is absolutely catastrophic. So could you give some confidence that this is being looked at scientifically, and if there is a way of detecting for example if we are anywhere near that cliff-edge of energy security?

**Andy Kerr:** It is worth saying that there are two or three different parts here. One is around access to oil, so when we had the Grangemouth strikes a couple of years ago, there was clearly an issue. There is also an issue about access to gas, because we are importers now, but at the moment, that isn't a problem because we have opened up a lot more terminals for gas. The one people mostly think about is electricity, and certainly the power-cuts in California were largely because the government capped the output costs, but not the input costs, and the businesses were going bust basically, so they shut down the power stations. So it was actually human-induced if you like. For the UK I think the first thing to say is that whoever is the Energy Minister, which is Amber Rudd, actually an alumnus of this University, she would lose her job if there are unplanned power-cuts, so the first thing she should have done when she walked into that job a couple of weeks ago was ask very hard questions about how close we are to not being able to deliver the electricity we need. This coming winter we are really quite tight in the UK because a number of coal-fired power stations have closed down for air pollution reasons, they had a choice, but they chose not to put very expensive remedial technology into their power stations, so they are shutting them instead, so we are actually quite tight. Now, if you talk to the National Grid they would say 'We are going to be fine'. But I did hear Ian Marchant, ex-CEO of SSE (Scottish and Southern Energy) say a couple of weeks ago, 'Yes, we are about 2 or 3% okay, but then we are reliant on 10% imports from France for example, from their nuclear power stations. Now if something happens it is very cold out there for a few weeks we are not necessarily going to get all of that'. So he was obviously a bit more concerned. I genuinely don't know, but it is certainly something I would be looking at if I were in her shoes at the moment.

**Charles Swainson:** I got into an argument with some folk the other week, or my son principally, and the criticism was that, okay, so wind power is a good idea and kind of works, intermittent and all that, but apart from the community schemes that you have seen on the Isle of Eigg for example which seems to really work at that level, the rest of it could be simply characterised as shifting

money from the poor to the rich, because everybody has to pay through their bills, and a lot of poor people have to have electricity, and yet the main beneficiaries are the large companies who own land, or the landowners, so what is the counter-argument for that?

**Dr Andy Kerr:** I think that has been one of the big challenges. Where you have had renewables which have been inherently higher cost than alternatives, you have seen those with capital or with land taking advantage of that, and there has been a movement of money from the poor to the rich. What they have tried to do is to add what they call a social cost onto your bill, which actually drives energy efficiency measures in poorer homes. What they have used that money for, and that is taken from every bill, it is a UK-wide scheme that has been running for many years, then aim that money at those homes that are the most vulnerable, so there has been a substantial sum of money spent trying to improve the quality of the housing in the UK. It is still pretty ropery, and one of the challenges that we have within Scotland, is we have phenomenal rates of fuel poverty, that is where somebody in a household has to spend more than 10% of their post-tax income on energy, and we actually have really bad rates of extreme fuel poverty, that is more than 20%. That is a shocking statistic in a modern country, and so I think there is a huge amount that needs to be done to try to tackle that, which is about improving the quality of housing, but there is always going to be a challenge. What we are finding now is there is a limit to how much money will be spent on subsidies, called the 'Levy Control Framework', and we are getting quite close towards that cap. So in other words you will not be able to put more renewables in unless essentially they can compete directly in the market without subsidy. We are getting quite close to the point where that works, but overall if you look at the surplus over ten years of public policy between 2000 and 2010, there has been a fairly chunky move of money from poor people to rich people; it is now being reversed, and certainly in Scotland they are doing a lot to try to encourage community ownership, or community access to energy, even where they don't own the land, so that they become equity shareholders within that system, and that is definitely starting to have an impact on certain communities. I think they are recognising the problem and starting to address it, but it has been a problem.

**Chairman:** If there are no more questions from the floor, can I ask Professor Macpherson if there are any online questions?

**Professor Stuart Macpherson:** I'm afraid there are not.

**Chairman:** In that case, I wonder if I could ask something. In the course of my three years studying Law? I remember I encountered for the first time a mythical character, the man on the Clapham omnibus. The man on the Clapham omnibus was a man of average intelligence, average income, guaranteed to have moderate and reasonable views on every subject. That at least was the perception of the residents of Clapham at the time I studied Law. My question is, what message would you give to the man on the Clapham omnibus as to his own participation in achieving lower carbon usage? I ask that question against the background of two things; first of all you have talked about national targets and international co-operation in this area, and it may appear to the man on the Clapham omnibus that this is all something far too remote from him, or her I suppose we have to say nowadays. And the second thing is that there is perhaps a conscientiousness on behalf of this reasonable person that mixed messages have come out over the years, and I think in particular about the use of diesel cars. So the short question is, what should the individual on the Clapham omnibus be doing and thinking about this, apart from continuing to use the bus.



**Dr Andy Kerr:** Not only that, but a hybrid bus or an electric bus as well. I think the message, and I am putting my ECCL hat on here, the message that we have when people come through the door of all sorts, community groups, businesses and so on is, we don't talk about climate change, we don't talk about national targets, we don't talk about international negotiations. What you actually start to focus on is how do we make their well-being better, most of us want warm houses, most of us want efficient transport systems, most of us want access to electricity as and when, and the question is, how can we innovate, how can we bring ideas through and practical solutions, that help them meet that. Because, having been around this piece for however many years, we saw people trying to scare people around climate change, saying look, it is going to be really bad, therefore you must do something, ten or fifteen years ago. It didn't work, it won't work now. So going back and saying 'Hey look, climate change is terrible', even if it is it just doesn't work. It has to be located in how they live their lives, and so we talk to communities, we talk to businesses; for businesses it is how can we help them develop new effective products and services. For communities, is how can we make their well-being, how can we help them live their lives better in terms of the energy use. So everything is focussed actually around how we can support their needs in a way that happens to be low carbon. So you don't force it on them, you actually show them, and the whole point about innovation, going back to my original point about the space pen, it is what works for them. We are not going to come up with some elegant top-down solution, it is what actually works for local communities. That is really where we focus, and that is the message we have for the equivalent of the Clapham man, for the people who come in through this building.

## **B Presentation of the Report of the Business Committee**

at the General Council Meeting on 6 June 2015

*Convener of the Business Committee: Professor Charles Swainson*

**Convener:** Thank you Chancellor's Assessor. Chancellor's Assessor, University Secretary, Members of the General Council and guests. It is a pleasure to address you at this Half-Yearly Meeting of your General Council during the second Alumnus Weekend of the modern era organised by Development & Alumni here at our University. I do hope that you are enjoying yourselves remembering the great time you had here, certainly I did, visiting familiar and maybe unfamiliar parts of the University, and this building was quite unfamiliar to me as an undergraduate. Renewing friendships, perhaps making new ones, and above all enjoying our fine Scottish summer weather.

It has been quite a busy six months for your Business Committee. I am going to talk about one particular event, which was three weeks or so ago we had a student sit-in at Charles Stewart House on Chambers Street in protest at the University's position on investment in companies extracting, refining, selling and so on fossil fuels. I think that this was handled at the end of the day very effectively. Universities such as this, large institutions, can never win the argument in the heat of the moment, particularly in the days of social media, but you can win the day at the end of it, and I think that is exactly what happened.

Unlike some other institutions that have taken a stance on this particular issue recently, this University had a long consultation with students and with staff, with people with widely differing views, and came to a very balanced set of decisions that blended in my view academic rigor, engagement with outside partners such as industry, and protecting the position and the finances particularly of this university in order to agree and affect change. No matter what our individual views may be on that subject everybody gets something from this. I mention this, because I think

this illustrates well for me two things; one is the ethos and the point of the University, because that piece of work illustrated for me perfectly the principles of logic, philosophy and ethics, which those of you will remember in the great days of the Renaissance and the Enlightenment were the under-pinning pieces of work in all universities, certainly across Europe. And I think that this episode demonstrated both the skills and the strengths of this particular institution.

Now to more prosaic matters, your Academic Standing Committee, led by Professor Macpherson here, who is managing the emails, and obviously over-whelmed by the traffic, has continued to enquire into and support our University's international research and teaching excellence. You have heard and read in the papers about how our University has moved up the research rankings in the UK and in international ranking tables. Sadly there has been no Research Excellence Framework dividend from our Government in Scotland, unlike our sister universities in the rest of the UK, but there are always ways around that, and I am sure that at the end of the day we will not suffer greatly.

At the micro level we have learned what it is to be a Rising Star at this university, and the quite unique pressures that come to bear on academic life which are not well understood I think outside the institution. We have heard that the regulatory burden for example on UK universities is quite considerable and may be more than in some comparator, particularly other European, countries. The efforts the University is going to, to improve the student experience are very welcome of course, but they are also very time-consuming and take considerable effort from individual members of staff. We learned that some of the best feedback has come from staff who have been able to engage students, either directly in research, or indirectly through their teaching. It was evident in our discussions that not everybody can be a great teacher, but everybody can be good and that teaching excellence is rewarded and maintained at this university.

Your Constitutional Standing Committee, led by Gordon Cairns, is revising the General Council leaflet information to illustrate better the role of the General Council and examples of how we play into university life. The Committee will be watching the Scottish Government's reaction to the very mixed consultation responses to the proposed Higher Education Bill, and it will be interesting to see whether they will listen or press on with essentially an ideology.

Your Finance & Services Standing Committee, led by Kirsty MacGregor, has not met since my previous report.

Your Public Affairs Standing Committee, led by Matt McPherson, has supported Development & Alumni with events planning for this weekend. I would urge you to come to the Principal's interview tomorrow afternoon conducted by a member of the Business Committee, Sir Philip Mawer, It is likely to be informative as well as entertaining. Matt and his colleagues have been thinking hard about how the Business Committee could use social media better to engage with recent graduates, and will bring a report to a future meeting. On the same subject you will be glad to know that *Edit* is now live online, and can also be downloaded as an app to your smartphone, so you can always keep in touch with the university that you love.

We are delighted to welcome the new Rector to Edinburgh, who is unable to be here today, Steve Morrison. Steve has an interesting background as Chief Executive of Granada TV, before starting his own media consultancy and production company. I have met with him and he has told me how he would like to work with the General Council in furthering the aims of the University, and I look forward to that, and to him attending future Half-Yearly Meetings.

I would like to particularly thank two people this morning, that is Alan Johnston and Ann Smyth, who is sitting in the audience here, for the unstinting service they have given to the Court and the Business Committee as your General Council Assessors. Alan, a former Convener of the Business Committee, has completed one term and Ann has done a full two terms. They have contributed greatly of their time and their effort, and have been regular attendees at the Business Committee assisting our understanding of Court business and stimulating interesting discussion. Alan Johnston will not be lost to the Court as he has been appointed as an independent Governor, which we are very pleased about. We will be marking our thanks to them both at the July meeting of the Business Committee. We welcome new Court Assessors; Ritchie Walker, who has been a member of the Business Committee for two terms, and is a former President of the Graduates' Association, who I think is sitting there, and Alan Brown, who many of you will know because he sits there conspicuously in a white jacket during the summer, as a former Convener, and indeed as a Regent. Our newly elected Court Assessors later in the summer will join our current third Assessor Doreen Davidson. I am sure they are going to be a very effective team on your behalf.

That concludes the formal report of your Business Committee, however, before sitting down I would like to draw your attention to the display in the foyer and ask you to look and hopefully buy the book 'Private Giving Public Good – at the University of Edinburgh' by Jean Grier and by our former Senior Vice-Principal Mary Bownes. Jean is here looking after the stall and Mary will be available over in the Playfair Library later, but it is a lovely book, a beautifully illustrated book. It is the first major publication on the University of Edinburgh for more than ten years, and it examines the effect of philanthropic giving on the University, a really interesting topic to think about. It covers much of the historical background, the establishment of the University, and the impact of philanthropy on buildings, student life, sporting success which we enjoy enormously, collections, bursaries and other awards which are so important to attract the best students from around the world to this university, and looks as well at how the benefits of that research and scholarship continue to influence the world. So please do have a look at them, here and over at the Playfair Library. Thank you Chairman.

**Any member who does not have web access may request a copy of *Annex* to the *Billet* from the General Council Office:**

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