# Climate change and energy

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#### Essentials

#### Taught programmes MSc degrees

Climate Change and Development Climate Change and Policy Energy Policy for Sustainability

#### Postgraduate diplomas

Climate Change and Development Climate Change and Policy

#### **Related programmes**

MSc in Innovation and Sustainability for International Development (p144) MSc in Science and Technology Policy (p145) MSc in Sustainable Energy Technology (p88)

#### **Admissions requirements**

For information on overseas qualifications that meet the admissions requirements, refer to pages 156-157

#### **MSc in Climate Change and Development**

A first- or upper second-class undergraduate honours degree in either a social or a natural science and two years' professional work experience in a developing country or in development-related work. Applications must be accompanied by a detailed, two-page personal statement and a full CV

#### MSc in Climate Change and Policy; MSc in Energy Policy for Sustainability

A first- or upper second-class undergraduate honours degree in either a social or a natural science. Applicants with relevant professional experience will also be considered

# Postgraduate Diploma in Climate Change and Development

A first- or second-class undergraduate honours degree in either a social or a natural science and two years' professional work experience in a developing country or in development-related work. Applications must be accompanied by a detailed, two-page personal statement and a full CV

### Postgraduate Diploma in Climate Change and Policy

A first- or second-class undergraduate honours degree in either a social or a natural science. Applicants with relevant professional experience will also be considered

#### English language requirements MSc and Postgraduate Diploma in Climate Change and Development; MSc in Energy Policy for Sustainability

IELTS 7.0, with not less than 6.5 in each section. Internet TOEFL with 100 overall, with at least 21 in Listening, 22 in Reading and 27 in both Speaking and Writing

#### MSc and Postgraduate Diploma in Climate Change and Policy

IELTS 6.5, with not less than 6.5 in Writing and 6.0 in the other sections. Internet TOEFL with 92 overall, with 21 in Listening, 22 in Reading, 24 in Speaking and 25 in Writing. For more information and alternative English language requirements refer to page 156

#### Fees

Refer to pages 158-159 for information on fees

#### **Further information**

All programmes except the MSc in Energy Policy for Sustainability

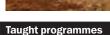
Professor Martin Todd, School of Global Studies, University of Sussex, Falmer, Brighton BN1 9SJ, UK T +44 (0)1273 873723 E climate@sussex.ac.uk

#### www.sussex.ac.uk/climatechange

MSc in Energy Policy for Sustainability School of Business, Management and Economics,

Postgraduate Office, Mantell 2b3b, University of Sussex, Falmer, Brighton BN1 9RF, UK T +44 (0)1273 872717 E pgbmec@sussex.ac.uk www.sussex.ac.uk/spru

- Climate change is perhaps the most important issue of our time. The challenge is two-fold: to make a transition to a lower-carbon global economy, and to adapt to the impacts of future climate changes. To meet these challenges, society needs professionals and policy-makers who understand the complex, multidimensional scientific, socioeconomic, technological and institutional issues of climate change mitigation and adaptation.
- Our climate change and energy programmes are designed to provide state-of-the-art training for this expanding professional market.
- Sussex is renowned for its agenda-setting, interdisciplinary teaching and research in science, development, and policy studies. You will be taught by leading researchers who have played key roles advising governmental/intergovernmental bodies and non-governmental organisations (NGOs) on climate change mitigation and adaptation.
- You will be taught by faculty from the Department of Geography, SPRU – Science and Technology Policy Research, and the Institute of Development Studies (IDS).
- The Climate Change and Development research team at IDS promotes collaborative research and policy analysis, delivery of high-quality research programmes, knowledge services, teaching and training.
   The team works closely with the University of Sussex and a strong network of partners in developing countries.
- Find out about the Sussex Climate Network at www.sussex.ac.uk/climatechange



#### MSc in Climate Change and Development 1 year full time/2 years part time

You will be based in the School of Global Studies. This programme is taught jointly by IDS and the School of Global Studies.

Climate change is already affecting the world's poorest and most vulnerable people, who often lack the robust systems and capacity needed to cope. This programme equips both those new to the field and development practitioners with the key skills and knowledge to work on the implications of climate change for global and regional development.

You will acquire specialist knowledge of the causes of climate change (taught specifically for non-climate specialists), the physical and human consequences, and efforts to mitigate and adapt to a changing climate. Throughout, the emphasis is on the specific implications of climate change for poverty in developing countries, the processes of adaptation, and policy responses. You can develop a specialist thematic or regional enquiry in the dissertation.

#### Career opportunities

This programme will equip you with the skills for a career in government departments such as the Department for International Development (DFID) and environment and climate change ministries, as well as UN agencies like UNFCCC, and NGOs such as Oxfam, Practical Action, Plan International, Christian Aid, and the International Committee of the Red Cross. Graduates will be able to apply their expertise to academic research in universities and institutes.

#### Programme structure

Autumn term: Climate Change Science
• Ideas in Development and Climate Change.

Spring term: you choose two courses from Challenges in Climate Prediction
• Climate and Energy Policy • Climate
Resilient Development • Critical Debates in
Environment and Development • Innovation
for Sustainability • Low-Carbon Development.
In addition you take relevant research
methods courses.

Summer term and vacation: supervised work on a dissertation and relevant research methods courses including Geographical Information Systems • Quantitative and Qualitative Research Methods.

#### Assessment

Courses are assessed by essays, short term papers, policy briefs, presentations, research proposal, and book reviews.

#### Postgraduate Diploma in Climate Change and Development 2 terms full time

The structure of the Postgraduate Diploma is the same as that of the MSc degree programme of the same name, but Diploma students do not write a dissertation. The Postgraduate Diploma is taken over the autumn and spring terms only.

#### MSc in Climate Change and Policy 1 year full time/2 years part time

You will be based in the School of Global Studies.

This MSc integrates natural and social science dimensions of climate change. You cover international, national and local policy arenas.

Courses on climate science are taught by Geography faculty and are designed to be accessible for non-climate specialists. Courses on the economic, policy and technological dimensions of mitigation are taught by faculty in SPRU – Science and Technology Policy Research (refer to page 146). You can develop a specialist thematic or regional enquiry in the dissertation.

#### Career opportunities

You will acquire specialist knowledge of the causes and consequences of climate change, and the policy options for both the transition to a sustainable low-carbon economy and adaptation to climate impacts.

#### Programme structure

Autumn term: Climate Change Science
Introduction to Climate Policy and Economics.

Spring term: you choose two courses from Challenges in Climate Prediction

• Climate and Energy Policy • Climate Change Impacts and Adaptation • Innovation and Sustainability. In addition you take relevant research methods courses.

Summer term and vacation: you undertake supervised work on a dissertation with relevant research methods courses, including Geographical Information Systems

• Statistical Research Methods.

#### Assessment

Courses are assessed by essays, short term papers, policy briefs, presentations, research proposal, and book reviews.

# Postgraduate Diploma in Climate Change and Policy

#### 2 terms full time

The structure of the Postgraduate Diploma is the same as that of the MSc degree programme of the same name, but Diploma students do not write a dissertation. The Postgraduate Diploma is taken over the autumn and spring terms only.

# MSc in Energy Policy for Sustainability 1 year full time/2 years part time

You are based in SPRU – Science and Technology Policy Research. This MSc is led by the Sussex Energy Group (SEG), one of the largest social science energy policy research groups in the world and a core partner in the Tyndall Centre for Climate Change Research and the UK Energy Research Centre.

Modern industrial economies owe their existence to the enormous energy surplus obtained from fossil fuels and the revolutionary changes in technology and human welfare this has enabled. But fossil fuel consumption must be radically reduced if we are to avoid triggering dangerous climate change.

This MSc focuses on the opportunities, challenges and constraints associated with making the transition to a low-carbon energy system in both the developed and developing world, and the conflicts and synergies between this and other objectives such as energy security and market liberalisation.

You engage with concepts, theories, issues, challenges and debates within energy and climate policy, acquire skills in relevant analytical techniques and apply these to contemporary policy problems. This MSc integrates ideas from economics, innovation studies and policy studies but it assumes no previous training in these areas.

#### Career opportunities

This MSc aims to equip you for careers in a range of areas including energy companies, consultancies, independent research and advocacy organisations, local and national government, international organisations, regulatory agencies, trade associations, NGOs and Higher Education.

#### Programme structure

Autumn term: Introducing Energy Policy and Sustainability • Science, Technology and Innovation: Markets, Firms and Strategies

 Themes and Approaches to Energy Policy and Sustainability.

Spring term: Perspectives, Methods and Skills
• Statistical Research Methods. You also choose two from Energy and Climate Policy • Energy and Environmental Security • Energy Transitions
• Innovation for Sustainability • Low-Carbon Development.

Summer term: you undertake supervised work on a 20,000-word dissertation

#### Assessment

Courses are assessed by a combination of openbook examinations, analysis assignments, takeaway papers, policy briefs, extended essays and a dissertation.

This programme is under development and subject to validation.

#### **Specialist facilities**

## **Specialist facilities at the School of Global Studies**

The University offers extensive computing facilities with a full range of data-processing and communications software. Office space is usually allocated to students taking research degrees. You will have full access to the University's main Library and its online collection.

#### **Specialist facilities at IDS**

IDS plays a lead role in the provision, development and support of information and intermediary services that build a bridge between development research and development policy and practice. The IDS Knowledge Services include both broad-based services such as the development policy, research and practice information online gateway Eldis, and specialist services such as BRIDGE (gender), the Governance and Social Development Resource Centre (GSDRC) and the Livelihoods Connect Network. IDS Knowledge Services also work in partnerships with organisations in South Asia and sub-Saharan Africa. For more information, visit www.ids.ac.uk/go/knowledge-services

The British Library for Development Studies (BLDS) (refer to page 21) is Europe's most comprehensive research collection on economic and social change in developing countries. IDS students have full access to a wide range of online databases, CD-ROMs, e-books and e-journals in addition to the facilities at the University's main Library.

#### Faculty research interests

**Professor Richard Black** Global migration in response to climate change.

**Rob Byrne** Low-carbon development; renewable energy; socio-technical transitions.

**Terry Cannon** Refer to the Development studies subject entry on page 75.

**Adrian Ely** Innovation; sustainability; development; climate change and agriculture.

 $\mbox{\bf Mick Frogley}$  Refer to the Geography subject entry on page 101.

**Blane Harvey** Refer to the Development studies entry on page 75.

 $\begin{tabular}{ll} \textbf{Florian Kern} & \textbf{Governance of system innovation;} \\ \textbf{energy innovation policy.} \end{tabular}$ 

**Dominic Kniveton** Refer to the Geography subject entry on page 101.

**Matthew Lockwood** Refer to the Development studies subject entry on page 76.

**Professor Gordon MacKerron** Refer to the Science, technology and innovation subject entry on page 146.

**Francis McGowan** Refer to the Politics subject entry on page 139.

**Julian Murton** Refer to the Geography subject entry on page 102.

**Lars Otto Naess** Refer to the Development studies subject entry on page 76.

**Andy Newsham** Refer to the Development studies subject entry on page 76.

**David Ockwell** Low-carbon technology transfer to developing countries; energy policy; communication and behaviour change.

**Pedram Rowhani** Climate change and food security; land cover change; GIS.

**Steve Sorrell** Energy and climate policy; emissions trading; energy efficiency; economics; transport modelling and policy.

**Lee Stapleton** Energy efficiency; environmental economics; quantitative techniques.

**Thomas Tanner** Refer to the Development studies subject entry on page 76.

**Professor Martin Todd** The impact of climate change on hydrological and ecological systems; atmospheric aerosols.

**Frauke Urban** Refer to the Development studies subject entry on page 76.

Yi Wang Climate science: terrestrial ecosystems, global bio-geochemical cycles; climate change; ocean-land-atmosphere interaction; tropical convection.

**Jim Watson** Energy policy; energy and development; sustainability, technology innovation.