



**UCL ENERGY  
INSTITUTE**



Project funded by British Council Ukraine

# Russia-Ukraine-EU energy partnership towards Energy Security

LONDON, UK

**11<sup>th</sup> of September 2014**

## PROGRAMME

**11.09.2014**

**08:30-09:00**

### REGISTRATION AND REFRESHMENTS

**09:00-09:05**

Opening Event - Raimund Bleischwitz, UCL Inst. for Sustainable Resources, UK

**09:05-09:10**

Project Introduction - Catalina Spataru, UCL Energy Institute, UK

**09:10-09:30**

Michael Grubb, UCL Inst. for Sustainable Resources, UK Title: Security and the EU 2030 energy & climate goals

**09:30-09:35**

**Q & A**

### Overview of current Ukraine energy situation and challenges

**09:35-09:50**

Vitalii Fylenko, Department of Alternative Energy Technologies and Ecology, V.N. Karazin Kharkov National University, Ukraine Title: Current Energy System in Ukraine

**09:50-10:05**

Kostiantyn Niemchenko, School of Physics and Energy, V.N. Karazin Kharkov National University, Ukraine Title: Five steps for energy security in Ukraine

**10:05-10:20**

Tetiana Vikhtynska, V.N. Karazin Kharkov National University, Ukraine Title: Renewable Energy – Challenges of today

**10:20-10:30**

Ivan Karpenko National University of Kyiv Title: Technical challenges in exploration and development of shale gas in Ukraine. Ways we motivate foreign and Ukrainian E&P companies.

**10:30-10:40**

Gennady Mishuris, Aberystwyth University, Wales, Title: FP7 IAPP project HYDROFRAC project: Recent advances in mathematical and numerical modelling of hydrofracturing.

**10:40-10:50**

**Q & A**

### The broader energy landscape with focus on RUSSIA-UKRAINE-EU

**10:50-11:20**

Tatiana Mitrova, Energy Research Institute of the Russian Academy of Sciences, Russia Title: Russia-Ukraine-EU Energy Triangle

**11:20-11:50**

Angus Paxton, Pöyry Management Consulting, UK, Title: The Ukraine Crisis – could gas supply disruptions impact Europe?"

**11:50-12:20**

Nigel Jollands, European Bank for Reconstruction and Development, Title: Energy efficiency – a critical ingredient in delivering energy security in Ukraine – the experience of the EBRD

**12:20-12:30**

**Q & A**

**12:30-13:30**

### NETWORKING LUNCH

**13:30-15:30**

**Towards a roadmap of actions for Ukraine with focus on the route Russia-Ukraine-EU**  
Catalina Spataru, Raimund Bleischwitz

**15:30-16:00**

### AFTERNOON TEA

**16:00-17:00**

General discussions **The Future Geopolitics of Energy:** What next after Russia and Ukraine?  
Mark Barrett, Catalina Spataru

**17:00-17:30**

**CONCLUSIONS & CLOSE OF EVENT**

The discussions will be held under the Chatham House Rule.

## SPEAKERS INFORMATION

11.09.2014

### **Raimund Bleischwitz, BHP Billiton Chair in Sustainable Global Resources, Institute of Sustainable Resources, University College London, UK**



governance issues.

Prof. Raimund Bleischwitz is BHP Billiton Chair in Sustainable Global Resources at University College London, Institute for Sustainable Resources (UCL ISR). He was Co-Director on 'Material Flows and Resource Management' at the Wuppertal Institute in Germany until 2013. Raimund spent a fellowship at the Transatlantic Academy (TA) in Washington DC in 2011 and 2012 where he co-authored a report about the "Global Resource Nexus"; he had other fellowships at John Hopkins University (AICGS JHU) and in Japan (JSPS). He has been visiting professor at the College of Europe in Bruges (Belgium) since 2003, teaching climate and energy and industry and sustainability. Raimund has a PhD and a 'Habilitation' in economics and some 200 publications on resource efficiency/productivity, eco-innovation and enabling conditions, sustainable growth / green economy, raw material markets and conflicts, and

### **Catalina Spataru, Senior Researcher in Smart Grids and Energy Networks, Energy Institute, University College London, UK**



Dr. Catalina Spataru is a Senior Researcher in Smart Grids and Energy Networks at University College London, Energy Institute. Her research is on energy networks, energy systems dynamics, storage, energy resources, and security. She has a PhD in Gas build-up and explosions following releases of natural gas/hydrogen from low and high pressure pipelines, from Loughborough University, UK. She has been a visiting researcher at MIT, USA working on vulnerability of interdependent energy networks (gas and electricity). She had other fellowships, at Complutense de Madrid, Spain (Socrates-Erasmus), University of Perugia, Italy, Carnegie Mellon University, USA. She has been leading several projects on various topics, e.g. power blackouts, energy networks and policy. She is supervising several PhD students, teaching energy systems for MSc students at UCL, acted as scientific committee chair for conferences, delivering several invited talks at international events and public engagement events.

### **Michael Grubb, Professor of International Energy and Climate Change Policy, Institute of Sustainable Resources, University College London, UK**



Michael Grubb is Professor of International Energy and Climate Change Policy at University College London (Institute of Sustainable Resources), editor-in-chief of the journal Climate Policy, and Senior Advisor on Sustainable Energy Policy to the UK Energy Regulator Ofgem. His former positions include Senior Research Associate at Cambridge University (Departments of Economics and Land Economy); Chair of the international research organization Climate Strategies; Chief Economist at the Carbon Trust; Professor of Climate Change and Energy Policy at Imperial College London; and head of Energy and Environment at Chatham House, and he continues to be associated with these institutions. Professor Grubb has also served on the UK Climate Change Committee, established under the UK Climate Change Bill to advise the government on future carbon budgets and to report to Parliament on their implementation. In 2013 he was the Specialist Advisor to a House of Lords European Committee enquiry 'No Country is an Energy Island: securing investment for the EU's Future' (2013). Michael Grubb is author of eight books, fifty journal research articles and numerous other publications. He has held many advisory positions with governments, companies and international studies on climate change and energy policy, and has been a Lead Author for several reports of the [IPCC](#) on mitigation, including the IPCC Fourth Assessment Report. His book *Planetary Economics*, which brings together the lessons from 25 years of research and implementation of energy and climate policies, was published in March 2014: it has received widespread accolade as a 'seminal' contribution, 'comprehensive and profoundly important' for its presentation of a new approach to both the theoretical underpinnings and the practical policies for tackling energy and climate change challenges.

### **Mark Barrett, Senior Lecturer, Energy Institute, UK**



Dr. Mark Barrett has a degree in Physics and Philosophy and a PhD in energy modelling. He has thirty years experience in modelling and developing policies for energy demand and supply systems, and transport systems so as to meet environmental, economic and energy objectives. He has developed overall scenarios of energy and emissions, and the transport (surface and aviation) and electricity sectors in European countries. He has worked at both the international, national and regional level in the UK, Europe and Asia. He has worked for clients including Universities, the European Commission, the European Environment Agency, UK Government departments, the Japan Clean Air Programme, local authorities, private companies and consultancies, and non-governmental environmental organisations. Barrett became a Director of Sustainable Environment Consultants (SENCO), which he co-founded in 1996. He is now a Senior Lecturer at University College London and a Director of his own company, Sustainable Environment Consultants.

**Vitalii Fylenko, Corresponding Member of the International Academy of Life Protection, Member of the Public Council under the Ministry Energy and Coal Industry of Ukraine**



Dr. Vitalii Fylenko is a Corresponding Member of the International Academy of Life Protection in accordance with the February 17, 2012, decision of Presidium Academy. He is a member of a multi-stakeholder group (MSG) that includes representatives from the government, industry, and the civil society that oversees the EITI (Extractive Industries Transparency Initiative) process in Ukraine. The EITI sets an international standard for transparency in extractive industry payments and receipts. In countries participating in the EITI, companies are required to publish their payments to governments, and governments are required to publish what they receive from companies. Participation on the MSG gives Vitalii free access to relevant information about the energy market of Ukraine. He has been involved in several projects that deal with governance and policy analysis. Vitalii also has experience working with the Tempus project and is a specialist in active training methods. He has experience in development of curriculum and working programs in the framework of governance of global environmental change and for the Regional Seminar for Excellence in Teaching (RESET) workshop. Vitalii was a one of the key participants in the Tempus program "Improvement of Education in the Field of Environmental Management". Currently he is developing several projects including: the RESET project "Governance of Global Environmental Change," the TEMPUS IV Joint Project to Develop a New Regional Master Programme's "Training on Alternative Dispute Resolution as an Approach for Ensuring of Human Rights" (TRADIR); and the online project "The Energy Security Roadmap of Ukraine" among others.

**Konstantyn Niemchenko, Dean of the School of Physics and Energy, V.N. Karazin Kharkov National University, Ukraine**



Prof. Kostiantyn E. Niemchenko is the Dean of the School of Physics and Energy of V.N.Karazin Kharkiv National University, Kharkov Ukraine. He is Full Professor of Thermal Physics and Molecular Physics Department, Doctor of Sciences in theoretical physics (2003), Ph.D. in Theoretical Physics (1993). Fundamental researches: dissipative properties of superfluid  $^3\text{He}$ - $^4\text{He}$  mixtures, nucleation kinetics in superfluid mixtures, kinetic theory of multicomponent classical and quantum gases, interaction and evolution of narrow pulses of phonons in helium, new approach for nonlocal hydrodynamic description of superfluids, heat transfer by sound in classical and quantum substances. Applied researches in the medical devices for digital X-ray imaging devices, development of analytical and numerical methods for 3D imaging in radiography. Konstantin has more than 160 publications on theoretical physics, ecology and medical image processes.

**Tetiana Vikhtynska, Vice-dean of the School of Physics and Energy of V.N. Karazin Kharkov National University, Ukraine**



Expert in energy efficient and renewable energy resources. Senior lecturer in occupational safety and health, and civil defense. Member of the Academic Council of the Department of Physics and Energy. Field of interest: Career-oriented activities among school pupils. Teaching safety, life safety and protection in high school. Methods of teaching mathematics to undergraduate courses in higher education.

**Ivan Karpenko, Co-Director Petroply Research & Consulting Ltd**



Ivan Karpenko is a co-director of Petroply Research & Consulting Ltd and a PhD student at Taras Shevchenko National University of Kyiv. He worked at consulting company Mera Group (Canada), as a geoscientist at NJSC "Naftogaz of Ukraine" and later as a geomodeller at Regal Petroleum Ltd. In 2008-2012 in Naftogaz of Ukraine he was involved in projects related to offshore gas fields at Black and Azov Seas area, as well as other projects dedicated to unconventional hydrocarbon resources in Ukraine. In Regal Petroleum, Ivan coordinated a geomodelling of 5 company-owned gas fields in Eastern Ukraine region. He has a specialist degree in petroleum engineering and now is working on PhD project that is closer to geology and geophysics (a new method for shale gas reservoir diagnostics). At Petroply R&C Ltd he organizes and coordinates projects dedicated to conventional hydrocarbon deposits exploration, shale gas exploration in Dnieper-Donets basin (Eastern Ukraine) and improvement of hydrofracturing technology.

**Gennady Mishuris, Professor of Applied Mathematics, Aberystwyth University, Wales**



Gennady Mishuris is a WIMCS professor of applied mathematics in Department of Mathematics at Aberystwyth University (Dom AU) from 2007. His previous academic posts were in Russia (till 1993) and Poland (till 2007). Gennady has been awarded by Alexander von Humboldt Fellowship (Erlangen-Nuremberg University, Germany, 2000), Leverhulme Visiting Fellowship (LSBU, UK, 2004) and Marie Curie Fellowship (UoL, UK, 2007). He has an extensive expertise in securing international research funding and is now a coordinator of HYDROFRAC project: "Enhancing hydraulic fracturing on the basis of numerical simulation of coupled geomechanical, hydrodynamic and microseismic processes". This is FP7 PEOPLE IAPP (Industry and Academia Partnerships and Pathways) project which finishes this year. Gennady has PhD (from St Petersburg University, Russia, 1985) and a 'Habilitation' (from Cracow University of Technology, Poland, 1999) degrees in mathematics and mechanics and some 150 publications on applied mathematics with applications in various areas of solid and fluid mechanics, biomechanics, metal forming and others technological processes. Last year he was elected to be a Fellow of the Learned Society of Wales.

**Tatiana Mitrova, Head of Oil and Gas Department in the Energy Research Institute of the Russian Academy of Sciences (ERI RAS)**



Dr. Tatiana Mitrova has twenty years of experience in dealing with the development of Russian and global energy markets, including production, transportation, demand, energy policy, pricing, taxation and market restructuring. She also has broad experience in working with Russian ministries, as well as major Russian and international energy companies (Gazprom, Rosneft, TNK-BP, NOVATEK, RAO UES, Statoil, GDF SUEZ, Wintershall, etc.). In 2011-2012 Head of Global Energy in SKOLOKOVO Energy Centre responsible for analyses of the global energy markets development and the Russian Federation's energy export and import policy. In 2006-2011 Head of the Center for International Energy Markets Studies in ERI RAS. Dr. Tatiana Mitrova is a member of the Governmental Commission of the Russian Federation on fuel and energy complex, Russian Council on Foreign and Defense Policy and Valdai Club. Dr. Tatiana Mitrova is a graduate of Moscow State University's Economics Department. She is an Assistant Professor at the Higher School of Economics and Gubkin Oil and Gas University and Visiting Professor at the Institut d'Etudes Politiques de Paris (Sciences Po) Paris School of International Affairs. She has more than 120 publications in scientific and business journals and four books.

**Angus Paxton, Principal Consultant**



Angus Paxton gas transmission networks, gas storage, gas trading, gas market modelling and gas network analysis. Angus has led and managed several very large projects with wide range of clients. Angus has provided independent expert advice in several acquisitions and refinancing projects concerning gas transmission (both on- and off-shore), gas fired cogeneration, gas storage, gas market entry and renewable energy feed in tariffs. Angus has developed much of Pöyry's gas market modelling capability, and in particular led the modelling work that was carried out for the European Commission on the costs and benefits of harmonising Europe's of gas quality standards. Angus also developed a stochastic model of the European gas market specifically for the purposes of modelling Great Britain's security of supply. Prior to joining Pöyry, Angus was at National Grid NTS where he managed the production of the ten-year gas transmission investment plans and related approvals governance paperwork. Angus also assisted in the development of and regulatory output measures for the UK gas transmission network capacity, has been an important influence on the GBs capacity arrangements, and provided key input into many of the distinctive features of the GB gas market – capacity auctions, buy-backs and incentive regulation.

**Nigel Jollands, Senior Policy Manager, Energy Efficiency and Climate Change, European Bank for Reconstruction and Development**



Dr. Nigel Jollands has worked on sustainable energy and environmental policy for 22 years. In March 2011 he took up a post with the European Bank for Reconstruction and Development and is now in the role of Senior Policy Manager, Energy Efficiency and Climate Change where he works at the interface between policy and finance. This role includes supporting the Bank's investment programme through policy dialogue with governments in the Bank's area of operations (Central and Eastern Europe and Central Asia). Prior to this role, he spent 5 years as Head, Energy Efficiency Unit at the International Energy Agency. At the IEA he led the Agency's energy efficiency policy analysis, co-ordinating the Agency's Energy Efficiency Working Party, and liaising with multi-lateral energy efficiency initiatives including the G8 and the International Partnership for Energy Efficiency Cooperation (IPEEC). Nigel's previous positions include Principal Ecological Economist in the New Zealand Centre for Ecological Economics (NZCEE), Senior Lecturer at Massey University, and senior policy analyst in New Zealand's capital at various Ministries (Ministry of Commerce; Energy Efficiency and Conservation Authority and Ministry for the Environment). He is a regular presenter at international conferences, has published numerous journal articles and contributed to several books in the area of energy efficiency and ecological economics.

## THE VENUE

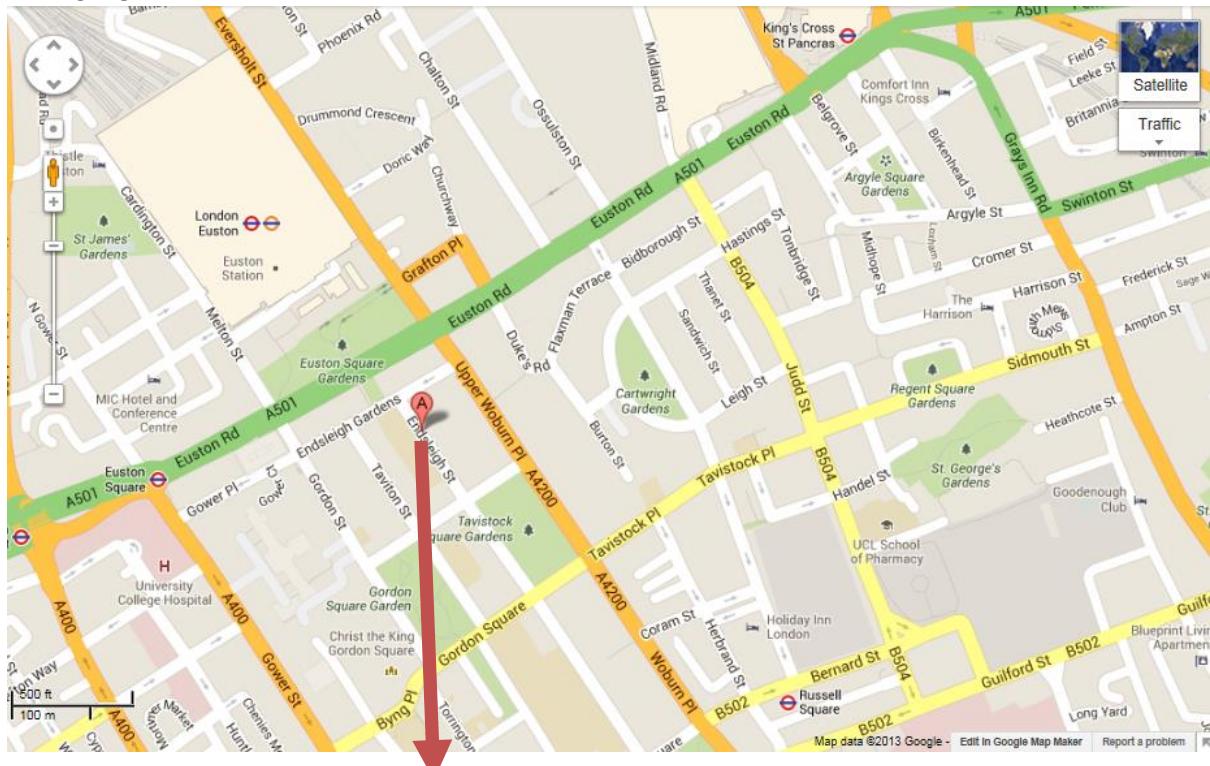
11.09.2014

The event will take place in **Bentham B31 Denys Holland Lecture Theatre**  
1-2 ENDSLEIGH STREET,  
Gideon Schreier Wing  
WC1H 0DS  
London, United Kingdom



Lunch and Coffee Breaks will be provided in **Cissy Chu ROOM** in the same building

### DIRECTION MAP



### Directions instructions:

Please use the side door that leads to a registration-type area just outside the Cissy Chu Room at the ground floor.

The front view of the entrance door