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# The Association for the Study of Peak Oil & Gas

## Press Information

9th International ASPO Conference  
27 - 29 April 2011, Brussels

+ extra events April 26 Walloon Parliament

May 03 European Parliament



Avec le soutien de



Wallonie



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## Press Facilities at the Brussels Conference

The 9th ASPO Congress will be held in Brussels at the Albert Hall. The Albert Hall is a well known historic building situated in the European quarter close by the official seats of the European Commission, Council of the European Union, and European Parliament. Travel directions can be found via [www.aspo9.be/travel](http://www.aspo9.be/travel).

### Press room

- To accommodate press interviews with conference speakers a dedicated room - the paramount room - has been allocated for journalists during the entire conference.
- There will be a sign at the paramount room with - “interview in progress, please do not disturb” - at the door that you can use when conducting an interview.
- There are a number of other locations available in case that the paramount room is occupied, including during plenary sessions the Auditorium which is not occupied, and the Roseland room (not occupied outside of lunches and coffee breaks)

### Arranging Interviews

- To arrange an interview with a speaker prior to the conference please send an e-mail to [rembrandtkoppelaar@gmail.com](mailto:rembrandtkoppelaar@gmail.com), and we will be in touch with you as soon as possible.
- To arrange an interview during the conference either contact the speaker directly or approach Patrick Brocorens of ASPO Belgium or Rembrandt Koppelaar of ASPO Netherlands and we will help you out where we can.

### General information and Interviews about the conference and ASPO

- General press interviews about the conference in French will be given by Patrick Brocorens of ASPO Belgium - [patrick.brocorens@umons.ac.be](mailto:patrick.brocorens@umons.ac.be).
- General press interviews about the conference in Dutch and English will be given by Rembrandt Koppelaar of ASPO Netherlands - [rembrandtkoppelaar@gmail.com](mailto:rembrandtkoppelaar@gmail.com).

### Internet Access at the Conference

- High speed internet is available from a standard service provider at the Albert Hall upon purchase of internet credits

# About ASPO International

## The Association for the Study of Peak Oil & Gas

ASPO is a network of scientists with members in 24 countries founded in 2001 to study and raise awareness on the depletion of fossil fuels. The organization is affiliated with institutions and universities, having an interest in determining the date and impact of the peak and decline of the world's production of oil and gas, due to resource constraints. ASPO's mission is to:

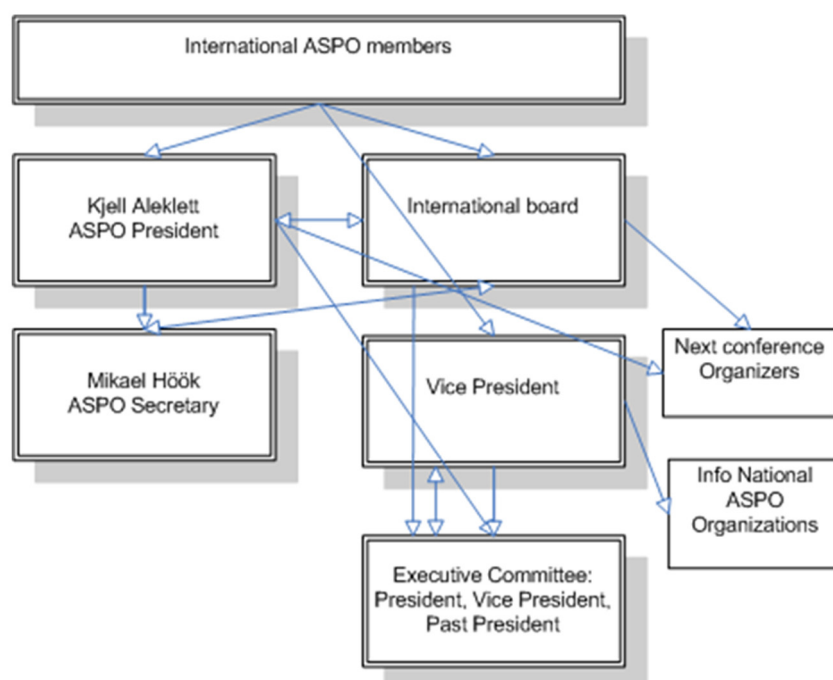
1. Define and evaluate the world's endowment of oil and gas;
2. Model depletion, taking due account of demand, economics, technology and politics;
3. Raise awareness of the serious consequences for Mankind.

The mission is carried out by members in a variety of manners. Activities include research resulting in publications in both academic and non-academic media, presentations, involvement of parliament members, and annual conferences. The organization arose from an idea of the mind of geologist Colin Campbell:

**Colin J. Campbell:** "It was in Germany that ASPO had its origin. On December 7th in the year 2000, I was privileged to give a talk on oil depletion at the ancient university of Clausthal in the Harz Mountains. The idea of forming an institution, or network of scientists concerned about the subject, developed. Next day, I took the idea to Professor Wellmer, the head of the BGR in Hannover, who gave it his support. The Norwegians were the next to join, followed by the Swedes. Today, ASPO is represented in almost all European countries.

The next step forward came when Professor Aleklett organised the first International Workshop on Oil Depletion in Uppsala in May of 2002, to be followed by workshops in Paris and Berlin.

## Organizational Structure as of 2010



# About ASPO International

## ASPO International board

- President: Kjell Aleklett Professor, Uppsala University, Sweden
- Honorary Chairman: Colin J. Campbell, Dr, Cork, Ireland
- Secretary: Mikael Höök, PhD student, Uppsala University, Sweden
- Member: Ugo Bardi, professor, University of Firenze, Italy
- Member: Richard O'Rourke, ASPO-6, Ireland
- Member: Pedro Prieto, ASPO-7, Spain
- Member: Feng Lianying, professor, University of Petroleum, Beijing, China
- Member: Simon Ratcliffe, South Africa
- Member: Richard Lawrence, USA
- Member: Bruce Robinson, Australia

## National ASPO Groups

ASPO groups can be found in many countries. Here is a list of established national ASPO groups.

- ASPO Argentina - Centro de Estudios de Energía, Política y Sociedad
- ASPO Australia
- ASPO Belgium
- ASPO Canada
- ASPO China
- ASPO France
- ASPO Germany
- Peak Oil Hong Kong
- ASPO Ireland
- ASPO Israel
- ASPO Italia
- ASPO Korea
- ASPO Kuwait
- ASPO Mexico
- Peakoil Nederland
- ASPO New Zealand
- ASPO Portugal
- ASPO Switzerland
- ASPO South Africa
- ASPO Sweden
- ASPO UK - Oil Depletion Analysis Centre (ODAC)
- ASPO USA
- ASPO Spain - Crisis Energética

Currently national ASPO groups are in the process of being formed in the following countries:

- India
- Mozambique
- Indonesia
- Venezuela

### Previous ASPO Conferences

The ASPO conferences are being held on an annual basis by one of its national members.

#### **ASPO 8 - United States** - “System Reset: Global Energy and the New Economy”

Sheraton Hotel, Denver, 11-13 octobre 2009.

Public support : Governor’s Energy Office

Private support : Pubco, M. Gottlieb Associates Inc., Simmons & Company International, Post Carbon Institute, Greenprint Denver, Smiley Oil, Denver Business Journal, American Lung Association, Clean Cities Denver Metro Coalition, altitude arts photographs, jazz 89, Terrachord Conference Services, Green Convene Strategies

#### **ASPO 7 - Spain** - “From below ground to above ground”

World Trade Center, Barcelona, 20-21 octobre 2008.

Public support: ICAEN, Catalanian Institute of Energy

Private support : ISTAS, Social Institute of Employ, Health and Environment, European Climate Forum

#### **ASPO 6 - Ireland** - “The Time to React?”

Cork City Hall, Cork, 17-18 September 2007

Public support: City of Cork, Ireland

Private support: NTR, Maxol, Forfas, Sustainable Energy Ireland (SEI), Amarach, Bioverda, KPMG, BioPower, Irish Examiner

#### **ASPO 5 - Italy** - San Rossore (nearby Pisa), 18-19 July 2006

Public support: Tuscan Regional Government, Comune dei Pisa, Ministero dell’Ambiente, Provincia de Pisa, University of Firenze.

Private support: CALP, Ecoblog, Fondazione Ente Cassa di Risparmio di Firenze, General Electric Oil and Gas, Italtbre-vetti, Vectrix, Europa, Veicoli S.r.l.

### **Before 2006, the conferences were called IWOOD (International Workshop On Oil and gas Depletion).**

#### **IWOOD 2005** - Portugal

Calouste Gulbenkian Foundation, Lisbonne, 19-20 may 2005

Private support: Calouste Gulbenkian Foundation, Partex Oil & Gas

#### **IWOOD 2004** - Germany

Berlin-Brandenburgische Akademie der Wissenschaften, Berlin, 25-26 May 2004

Public support: BGR, Institute for Geosciences and Natural Resources

Private support: BMW, Ruhrgas, WEG, Vattenfall, RWE

#### **IWOOD 2003** - France

Public support : Institut Francais du Pétrole, Paris, 26-27 May 2003.

#### **IWOOD 2002** - Sweden

Uppsala, 23-25 May 2002.

### Speakers at Previous ASPO Conferences

#### Energy Sector

Jim Barry, CEO, NTR Plc, Ireland  
Christian Beckervordersandforth, Ruhrgas  
Roger W. Bentley, Whitfield Solar Ltd  
Arthur E. Berman, Labyrinth Consulting Services, Inc., USA  
Jeffrey J. Brown, Independent Petroleum Geologist, USA  
Carlos Bruhn, Petrobras  
James Buckee, CEO Talisman Energy Inc, Canada  
Francois Cahagne, Gaz de France  
António Costa-Silva, Partex Oil and Gas Group  
François Cupcic, Total, France  
Peter A. Dea, Cirque Resources LP, USA  
RoseAnne Franco, PFC Energy  
Herman Franssen, International Energy Associates, MD, USA  
Francis G. Harper, BP  
Jeremy J. Gilbert, Barrelmore Ltd, retired Chief Petroleum Engineer from BP  
Jeffrey A. Johnson, ExxonMobil  
Jean Laherrere, retired Deputy Exploration Manager from Total  
Jeremy Leggett, CEO SolarCentury, UK  
Ray Leonard, Hyperdynamics Corporation, former VP from Yukos, Russia  
Marcio R. Mello, HRT Petroleum, Rio de Janeiro, Brazil  
Richard Meyer, Epuron GmbH  
Eddie O'Connor, Airtricity, Ireland  
Lord Ron Oxburgh, Former Chairman, Shell UK  
Francesco Racheli, GE Oil & Gas  
Gareth Roberts, Denbury Resources Inc., USA  
Mike Rodgers, PFC Energy  
Kristin Rønning, Statoil  
Carlos Rossi, Venezuelan Hydrocarbon Association  
Ali M. Samsam Baktiari, National Iranian Oil Company (NIOC), Tehran, Iran  
Hans-Wilhelm Schiffer, RWE Power  
Jörg Schindler, Ludwig-Bölkow-Systemtechnik GmbH

Matt Simmons, Simmons & Co. International, USA  
Chris Skrebowski, Energy Institute, UK  
Edward Warner, Expedition Oil Company, USA  
Jack Zagar, MHA Petroleum Consultants Inc., USA

#### Institutions

Olivier Appert, Institut Français du Pétrole  
Fatih Birol, Chief Economist, International Energy Agency  
Pierre-Rene Bauquis, Institut Français du Pétrole  
Jean Marie Bourdaire, World Energy Council, UK  
Cristina Castells, Barcelona Energy Agency, Spain  
Marcel Coderch, Consell Assessor per al Desenvolupament Sostenible de Catalunya, Spain  
Manuel Collares-Pereira, INETI, Lisbon, Portugal  
Gérard Friès, Institut Français du Pétrole  
Peter Gerling, BGR, Federal Institute for Geosciences and Natural Resources, Germany  
Eddy Isaacs, Alberta Energy Research Institute (AERI), Canada  
Chuck Kutscher, National Renewable Energy Laboratory, US DoE  
Vincent Lepez, Institut Français du Pétrole  
Vincent Matthews, Colorado Geological Survey, USA  
Bertrand Michel, Institut Français du Pétrole  
Albert Morcego, Institut Català d'Energia, Spain  
Scott Pugh, U.S. Department of Homeland Security  
Simon Ratcliffe, U.K. Department for International Development  
Olivier Rech, Institut Français du Pétrole  
James R. Schlesinger, Mitre Corporation, Former US Energy Secretary  
Marcel Schoppers, USA Jet Propulsion Laboratory, NASA, USA  
Paul Sears, Natural Resources Canada  
Friedrich-Wilhelm Wellmer, BGR, Germany

#### Academics

Kjell Aleklett, Uppsala Hydrocarbon Depletion Study Group, Uppsala University, Sweden

## Additional information about Previous ASPO Conferences

Pedro Almeida, University of Beira Interior, Portugal  
Robert U. Ayres, Emeritus Professor, INSEAD, France  
Ugo Bardi, University of Florence, Italy  
Albert Bartlett, University of Colorado, USA  
Susan Capalbo, Oregon State University, USA  
Carlos de Castro, University of Valladolid, Spain  
Kenneth Deffeyes, Professor Emeritus, Princeton University, USA  
Michael Dittmar, ETH Zurich, CERN, Switzerland  
Mario Giampietro, Universidad Autonoma de Barcelona, Spain  
Renato Guseo, University of Padova, Italy  
Nate Hagens, University Of Vermont, USA  
Charles A. S. Hall, University of Syracuse, NY, USA  
Marek Kolodziej, University of Illinois, USA  
Hon. Richard D. Lamm, University of Denver, USA  
Feng Lianying, China Petroleum University, Beijing, China  
Bob Lloyd, University of Otago Dunedin, New Zealand  
Mariano Marzo, University of Barcelona, Spain  
Dennis Meadows, Durham, NH, USA  
Rui Namorado-Rosa, University of Évora, Portugal  
Xiongqi Pang, China Petroleum University, Beijing, China  
Salvador Pueyo, Universitat de Barcelona, Spain  
Antonio Ruiz de Elvira, University of Alcala de Henares, Spain  
Kyle Saunders, Colorado State University, USA  
Bernd Senf, Berlin School of Economics (FHW), Germany  
John Theobald, University of California, USA  
Michael Webber, University of Texas, Austin, USA

### Politics

Marino Artusa, Environment Ministry of the Tuscan Region, Italy  
Terry Backer, State Representative of Connecticut, USA  
Yves Cochet, MP, former Minister of Territory and Environment, France

Debbie Cook, City of Huntington Beach, USA  
Jeffrey S. Dunn, Southern California Association of Governments, USA  
Hans-Josef Fell, Member of German Parliament, Die Grünen, Germany  
Antonio Castro Guerra, Secretary of State of Industry and Innovation, Portugal  
John Hickenlooper, Mayor of Denver, Colorado, USA  
Josep Huguet, Minister of Innovation, University and Enterprise, Catalonia, Spain  
Rolf Linkohr, Member of European Parliament, SPD, Germany  
Micheál Martin TD, Minister for Enterprise, Trade, & Employment, Ireland  
Michael Meacher, Labour Member of Parliament, UK  
Alfonso Pecoraro Scanio, Ministry of the Environment, Italy  
Vittorio Prodi, Member of European Parliament, Italy  
Rudolf Rechsteiner, Member of Parliament, Switzerland  
Bill Ritter, Governor of the State of Colorado, USA  
Fabio Roggiolani, Tuscan Regional Council, Italy  
Eamon Ryan TD, Minister for Communications, Energy, & Natural Resources, Ireland  
Hon. Edward Schreyer, Former Governor General of Canada

### Finance

Jason Bradford, Vital Farmland LP  
Jérôme Guillet, Dexia  
Jim Hansen, Ravenna Capital Management  
Eric Janszen, iTulip, Inc.  
Byron W. King, Agora Financial, LLC,  
Tom Konrad, AltEnergyStocks.com  
Steven Kopits, Douglas Westwood LLC  
Thomas A Petrie, Merrill Lynch  
Kevin Phillips, Commentator and Author of Bad Money  
Adam Robinson, RBS Sempra Commodities  
Jeff Rubin, CIBC World Markets  
Richard Vodra, Spire Investment Partners



Mamdouh G. Salameh, Oil Market Consultancy  
Service/World Bank  
Eddie Walshe, Poten Partners

### Other

Jaap Breunese, TNO, The Netherlands  
Matt Dempsey Editor Irish Farmers Journal  
Robert L. Hirsch, Senior Energy Advisor,  
Management Information Services, Inc. (MISI)  
Hannes Kunz, Institute for Integrated Economic  
Research, IIER , Zurich  
Pat Murphy, Arthur Morgan Institute for  
Community Solutions, NGO, USA  
Richard Heinberg, Post Carbon Institute, NGO,  
USA  
Rob Hopkins, Founder Transition Town Totnes  
Klaus Illum, ECO Consult, Denmark  
Harry Lehmann, Institute for Sustainable Solutions  
and Innovations, Germany  
Peter Maass, The New York Times Magazine  
Lisa Margonelli, New America Foundation, NGO,  
USA  
Chris Martenson, Creator of “The Crash Course”  
Rick Munroe, National Farmers Union of Canada  
Bruce Robinson, Sustainable Transport Coalition,  
in Perth, Western Australia  
Chris Sanders, Sanders Research associates  
Hartmut Schneider, BMW  
Frank Seyfried, VW  
Malcolm Slesser, Resource Use Institute, UK  
Heidi VanGenderen, Worldwatch Institute  
E. Rui Vilar, Fundação Calouste Gulbenkian,  
Portugal  
Rolf Willkrans, AB Volvo  
Jörg Wind, DaimlerChrysler

# Program Walloon Parliament Meeting Tuesday April 26

## 09:30 - 10:00 Opening

### Welcome Remarks

Ms. Emily Hoyos, President of the Walloon Parliament

### Introduction

Mr. Michel Lebrun, President of the “*Peak Oil & Gas Committee*” of the Walloon Parliament

## 10:00 - 12:45 What role for R&D in addressing Peak Oil?

### How to valorize research on the effects of Peak Oil for urban planning?

Susan Krumdieck, University of Canterbury, New Zealand

### An analysis of the effects of Peak Oil on the Walloon territory

Thierry Bréchet, Université catholique de Louvain, Belgium

### Discussion and Q&A

## 11:30 - 11:45 Coffee Break

### Debating Scarcity: Critical Social Science meets Peak Oil

Gavin Bridge, University of Manchester, United Kingdom

### Discussion and Q&A

## 12:45 - 14:15 Lunch Break

## 14:15 - 15:45 Peak Oil and Finance

### Is Growth Sustainable with Triple Digit Oil Prices?

Jeff Rubin, Author and Former Chief Economist, Canadian Imperial Bank of Commerce

### Discussion and Q&A

### Potential Impacts of Peak Oil on Financial Markets

Erik Townsend, former CEO Cushing Group, Private Investor

### Discussion and Q&A

## 15:45 - 16:00 Conclusions



# Program Brussels Conference Wednesday April 27

**08:00 - 09:00**      **Registration of Participants - Coffee and Tea**

**09:00 - 09:30**      **Opening of the Conference**

## **Welcome Remarks**

Paul Hohnen, Conference Facilitator

## **Introduction - ASPO and the Second Half of the Oil Age**

Colin Campbell, ASPO Honorary Chairman & Jean Laherrère, co-founder of ASPO

## **Conference Welcoming Address**

Philippe Henry, Belgian Minister of Environment, Spatial Planning, and Mobility of the Walloon Region

**09:30 - 12:30**      **Global Overview on Oil, Gas, & Coal Supplies**

## **The ASPO Perspective on Fossil Fuels**

Kjell Aleklett, Professor at Uppsala University, Sweden, President of ASPO

## **Title Pending**

Pierre Mauriaud, TOTAL

**Discussion and Q&A, Speakers + Panel Contributor Colin Campbell, Honorary Chairman of ASPO**

**10:50 - 11:20**      **Coffee Break**

## **Climate Change and Fossil Fuel Depletion**

Jean-Pascal van Ypersele, Professor at Université Catholique de Louvain, Vice-Chair IPCC

**Discussion and Q&A, Speakers + Panel Contributor Colin Campbell, Honorary Chairman of ASPO**

**12:30 - 13:30**      **Lunch Break**

**13:30 - 15:30**      **Natural Gas Supply**  
(Albert Hall Room)

**Russia and Norway: Natural Gas Prospects & Modeling Approaches** - Bengt Söderbergh and Kristofer Jakobsson, Global Energy Systems Group Uppsala University, Sweden

**The Energy Return on Investment of Norwegian Oil & Gas** - Leena Grandell, Independent Energy Analyst, Norway

**Caspian and Middle East Natural Gas: Trade, Geopolitics, and International Politics** - Mert Bilgin, Bahçeşehir University, Turkey

**Discussion and Q&A - Speakers + Jean Laherrère**

**15:30 - 16:00**      **Coffee Break**

**13:30 - 15:30**      **Alternative Energy Sources**  
(Chaplin Room)

**The Energy Report: 100% Renewable Energy by 2050**  
Yvonne Deng, consultant at Ecofys, UK

**Policies for a Full Scale transition to Renewable Energy**, Aviel Verbruggen, Professor at University of Antwerp

**EU Energy and Climate Policy towards 2050**  
Jørgen Henningsen,  
Senior Advisor at European Policy Centre

**Discussion and Q&A**

## Program Brussels Conference Wednesday April 27

**16:00 - 18:00 Frontier Fossil Fuels**  
(Albert Hall Room)

**Subsalt and Deepwater Oil Developments**

Jean-Marie Masset,  
Former Senior VP Geoscience TOTAL

**The Economic Prospects for Shale Gas**

Jean-Marie Bourdaire, advisor of Cheniere Energy,  
Former Director at IEA, Former Director at WEC

**The Global Growth of Underground Coal  
Gasification, with specific reference to Europe**

Marc Mostade, Technical Director Clean Coal, Ltd,  
Advisory Council UCG Association

**Discussion and Q&A - Speakers + Panel Contributor**

Arthur Berman, Labyrinth Consulting Services,  
Director ASPO USA, Editor The Oil Drum

**16:00 - 18:00 The European Electricity Grid**  
(Chaplin Room)

**Integration of Renewable Energy Sources in the  
European Electricity Grid**

Henrik Lund,  
Professor at Aalborg University, Denmark

**Impact of Renewable Energy Penetration on the  
Feasibility, Security, Costs of the Electricity System,**

Erik Delarue, Researcher at Foundation Flanders  
(FWO) at Catholic University Leuven

**Progress in Electrical Energy Storage Systems**

Yulong Ding, Professor at the Institute of Particle  
Science & Engineering, University of Leeds,  
United Kingdom

**Discussion and Q&A**

**18:00 - 18:25 Plenary Report Back in Albert Hall Room & Closing Address of Day 1**  
Paul Hohnen, Conference Facilitator



# Program Brussels Conference Thursday April 28

**08:00 - 09:00**      **Registration of Participants - Coffee and Tea**

**09:00 - 10:30**      **Long Term Perspectives on Energy & Industrial Civilisation**

**Effects of Triple Digit Oil Prices on the Economy**

Jeff Rubin, Author and Former Chief Economist, Canadian Imperial Bank of Commerce

**The Energy Costs to Produce Energy and Economic Growth**

David Murphy, Researcher at State University of New York

**Discussion and Q&A, Speakers + Panel Contributor**

Douglas Reynolds, Professor at University of Alaska Fairbanks, United States

**10:30 - 11:00**      **Coffee Break**

**11:00 - 12:40**      **Short Term Oil Market & Economic Developments**

**Scenarios for Peak Oil Confronted by a Global Crisis**

Jean-Luc Wingert, ASPO France & Symbioz Development

**Is this Peak Oil? An update on Supply, Demand and Capacity**

Chris Skrebowski, Peak Consulting

**Crude Oil Price Forecasts and Investment/Hedging Strategies**

Erik Townsend, former CEO Cushing Group, Private Investor

**Discussion and Q&A**

**12:40 - 13:40**      **Lunch Break**

**13:40 - 15:40**      **Energy and Agriculture**  
(Albert Hall Room)

**Energy Efficiency of Different Agricultural Systems**

Tiziano Gomiero, Contract Researcher at the University of Padova, Spain

**Towards a Truly Sustainable Agriculture**

Wes Jackson, President of the Land Institute, Kansas, United States

**Potential of the development of biobased products in Europe** - Jean-Luc Wertz, Valbiom, Gembloux Agro-Bio Tech, Researcher at Université de Liège

**Discussion and Q&A**

**13:40 - 15:40**      **European Energy Policy**  
(Chaplin Room)

**Peak Oil, Climate Change, and Energy Policy**

Euan Mearns, Honorary Research Fellow University of Aberdeen, Editor of The Oil Drum

**Mobility after Peak Oil in Europe**

Jörg Schindler, Researcher Energy Watch Group, ASPO Germany

**Material Scarcity and its Effect on Energy Solutions**

Derk Bol, Program Manager, Materials Innovation Institute M2i

**Discussion and Q&A**

**15:40 - 16:10**      **Coffee Break**

# Program Brussels Conference Thursday April 28

**16:10 - 18:00 Agriculture and Oil Markets**  
(Albert Hall Room)

**Oil, Agriculture, and the Long Term Price of Food**

Christian Anton Smedshaug,  
Senior Advisor Norwegian Farmer's Union

**Interlinkages between Energy and Agricultural Markets**

Geert Woltjer, Researcher at Wageningen University,  
Agricultural Economic Institute, Netherlands

**Title to be Announced**

Alex Evans, Non-Resident Fellow at the Center  
on International Cooperation (CIC) at  
New York University, United States

**Discussion and Q&A - Speakers + Panel Contributor**

René Poismans,  
Ministry of the Walloon Region, DG Agriculture

**16:10 - 18:00 Energy, Transport & Materials**  
**Modelling (Chaplin Room)**

**Modelling Costs and Material Requirements  
for Solar Energy**

Niels van Loon, Researcher TNO  
Industrial Innovation, Solar

**Oil Market & Oil Resources - A long term view with  
the World Energy Model Poles**

Alban Kitous, Senior Consultant, Head of Forecasting  
Studies Enerdata

**Impacts of high oil prices on Transport and  
the European Economy**

Michael Krail, Researcher at Fraunhofer Institute for  
Systems and Innovations Research ISI

**Discussion and Q&A + Panel Contributors**

Susan Krumdieck, Associate Professor,  
University of Canterbury, New Zealand

Dominique Gusbin, Director of the Team Energy and  
Transport at the Belgian Federal Planning Bureau

**18:00 - 18:25**

**Plenary Report Back in Albert Hall Room & Closing Address of Day 2**

Paul Hohnen, Conference Facilitator



## Program Brussels Conference Friday April 29

### 09:00 - 10:50 Oil Export Changes and Energy Policy

#### **Oil Export Changes and their Effects on Oil Producing Countries**

Paul Stevens, Professor Emeritus at University of Dundee, Senior Research Fellow Chatham House

#### **The Impending World Energy Mess and its Implications**

Darren Bezdek, MISI Director of Energy Studies, United States

Discussion and Q&A

### 10:50 - 11:15 Coffee Break

### 11:15 - 13:05 European Energy Policy in an Era of Expensive Oil

#### **Peak Oil Policy Options for Australia**

Bruce Robinson, Convenor ASPO Australia

#### **A view from the European Parliament**

Philippe Lamberts, Member of European Parliament, Chairman of the European Green Party

#### **Better Understanding of Global Oil & Gas Peaks: The Role of Government**

Roger Bentley, Researcher at Reading University, United Kingdom

Discussion and Q&A, Speakers + Panel Contributors

### 13:05 - 13:15 Closing Address on Future Recommendations

Paul Hohnen, Conference Facilitator  
Patrick Brocorens, ASPO Belgium  
Rembrandt Koppelaar, ASPO Netherlands

### 13:30 - 15:00 General Assembly of ASPO at the Albert Hall

ASPO members only (Universal Studios Room)

# Program European Parliament Meeting Tuesday May 3rd

**08:30 - 09:00**      **Registration**

**09:00 - 10:15**      **Peak Oil Evidence and Peak Oil Activities in different EU Member States**

## **Welcome Remarks**

Phillipe Lamberts, Member of European Parliament, Chairman of the European Green Party

Kjell Aleklett, President of ASPO, Head of the Global Energy Systems Group Uppsala University

Jeremy Leggett, UK Industry Taskforce on Peak Oil and Energy Security

Lord Ron Oxburgh, House of Lords, UK Parliament, Former Chairman of Shell

Michel Lebrun, Vice-President of the Belgian Walloon Parliament,  
President of the “Peak Oil & Gas Committee” of the Walloon Parliament

**10:15 - 10:45**      **Coffee Break**

**10:45 - 12:30**      **The EU and Peak Oil: Analyses and Policy measures**

**Chair:** Hughes Belin (Energy Journalist)

## **EU Transport Policy and Peak Oil**

Marjeta Jager, Director for General Policy, European Commission, DG Move

## **EU Energy Policy and Peak Oil**

Jan Panek, Head of Unit “Coal and Oil”, European Commission, DG Energy

## **EU Agricultural Policy and Peak Oil**

Tassos Haniotis, Director Economic Analysis Perspectives and Evaluations, European Commission, DG AGRI

## **Debate and discussion between Members of the European Parliament and Speakers**

**Conclusions:** Claude Turmes, MEP, Group of the Greens/European Free Alliance in the European Parliament



# About Peak Oil

## 1. Introduction

Oil has been known since antiquity but its industrial exploitation only began in the 19th century. The invention of the internal combustion engine made transport based on oil possible. The first automobile took to the road in 1882 and the first tractor ploughed its furrow in 1907. This cheap and abundant supply of energy changed the world in an unimaginable way, leading to the rapid expansion of industry, transport, trade and agriculture, which has allowed the population to expand six-fold in parallel. Although oil plays a so fundamental role in our modern societies, concerns about physical difficulties to obtain enough supply are often erased by the notion that “oil reserves are equivalent to 40 years of consumption”, thus suggesting that there is time to find solutions to oil depletion. This view, however, does not take into account the fact that because of physical and economic reasons, oil production reaches a maximum – a peak – and declines well before the exhaustion of the reserves.

## 2. Peak in Oil Discoveries

The peak of oil discovery was passed in the 1960s, and the world started using more oil than was found in new fields in approximately 1981. The gap between discovery and production has widened since. Many countries, including some important producers, have already passed their peak. For example, the group of OECD countries peaked in 2002 and production has declined by 7% since. The peak in discoveries, and subsequent production peak in many countries suggests that the world peak of production could be close at hand. (Figure 1).

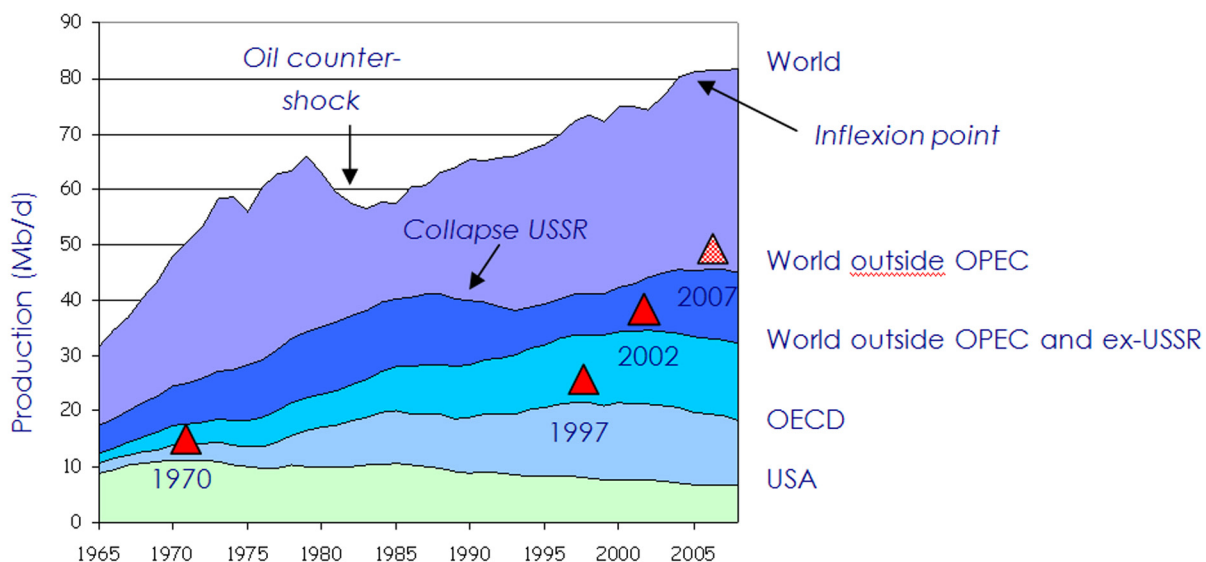


Figure 1: Evolution of the world hydrocarbon liquids production since 1965, sorted out in different groups of producing countries. The groups of countries having passed their peak are indicated by ▲ (peak passed more than 5 years ago) or by ▲ when peaking is not confirmed yet (peak less than 5 years old); peaking dates are indicated.

### 3. The oil production plateau & economic effects of high oil prices

The year 2004 is characterized by an inflexion point in the evolution of oil production : the production tends to form a plateau. In the medium term, this scenario is expected to continue. There is a visibility window of 6-7 years regarding the evolution of oil production: the average time to develop a major oil project. On that time scale, production capacity will be largely determined by decisions already taken, i.e. most of the decisions taken today will influence supply only from 2015 on. In the World Energy Outlook 2008, the International Energy Agency (IEA) has evaluated the decline rate of currently producing fields at 3,9%/y on average, meaning that between 2007 and 2030 production capacity equivalent to six Saudi Arabia needs to be developed to satisfy demand projections of the IEA. According to the WEO 2008, new oil field projects would have been insufficient from 2010 to 2015 in case of continued demand growth. To avoid any supply problem, the IEA urged oil producers to develop new projects (because of a long development period of 7 years on average). The problem of an 'oil crunch' has so far been avoided, however, by the unfortunate economic crisis that started in 2008, which lowered oil demand resulting in a surge of spare capacity on the market.

The global economy now appears to be faced by a 'double edged sword'. On one end rising oil prices caused by limited production capacity growth potentially pose a limit to economic growth as shown by Professor of Economics of California, James Hamilton. In looking at the effects of high oil prices, he found that the price spike of 2007-2008 led to 0.7% lower average global economic growth. The tight situation on the oil market hence seems to have had a significant contribution to the economic recession. On the other end high oil prices are necessary to spur investment in the oil industry because costs of marginal supply lie between 60 to 80 dollars per barrel. The long term situation on oil markets also has worsened quite significantly, as in its report to the G8, the IEA argued that the financial crisis of 2008 and the following low oil prices led to less future capacity: cancelations and delays of at least 18 months (equivalent to ~2% and ~5% of the current production, respectively). The decrease of the oil prices that followed the fall of demand accompanying the economic crisis is likely to be followed by a new price spike once the economy grows again, which could again induce an economic recession.

It thus appears that while physical and technical constraints on the resources do play a role, investment constraints (due to geopolitical, economic, climatic factors,...) have a larger short term effect on the shape of the production profile. Peak oil possibly will thus have the shape of an undulating plateau: production reaching a ceiling and fluctuating around that value for several years as a function of economic, geopolitical and financial factors. This can also be observed on a smaller scale. For European oil production the plateau lasted 6 years with fluctuations of ~3% before a decline set in. As observed in the recent past, the plateau phase could be characterized by price volatility, which damages the economy in case of spikes, slows down energy investments when the price falls to a low, and makes communication about the problem difficult because of mixed messages on future oil availability. This could impede the development of transition scenarios that are generally expected to be rather smooth.

## 4. Oil Market Export Developments

In addition, partly because oil markets are far from obeying the rules of a free market due to the unique OPEC cartel, worldwide oil exports could evolve much differently than production does. A producing country whose production declines (or stays flat) sees its exporting capacities declining still faster (Figure 2), as oil production declines typically affect exports and do not lead to cutting domestic consumption, even in a context of high oil prices. Domestic consumption is often sustained by an economy fed with petro-dollars, subsidy policies guaranteeing low cost fuel, and limited possibilities to substitute quickly oil by alternatives.

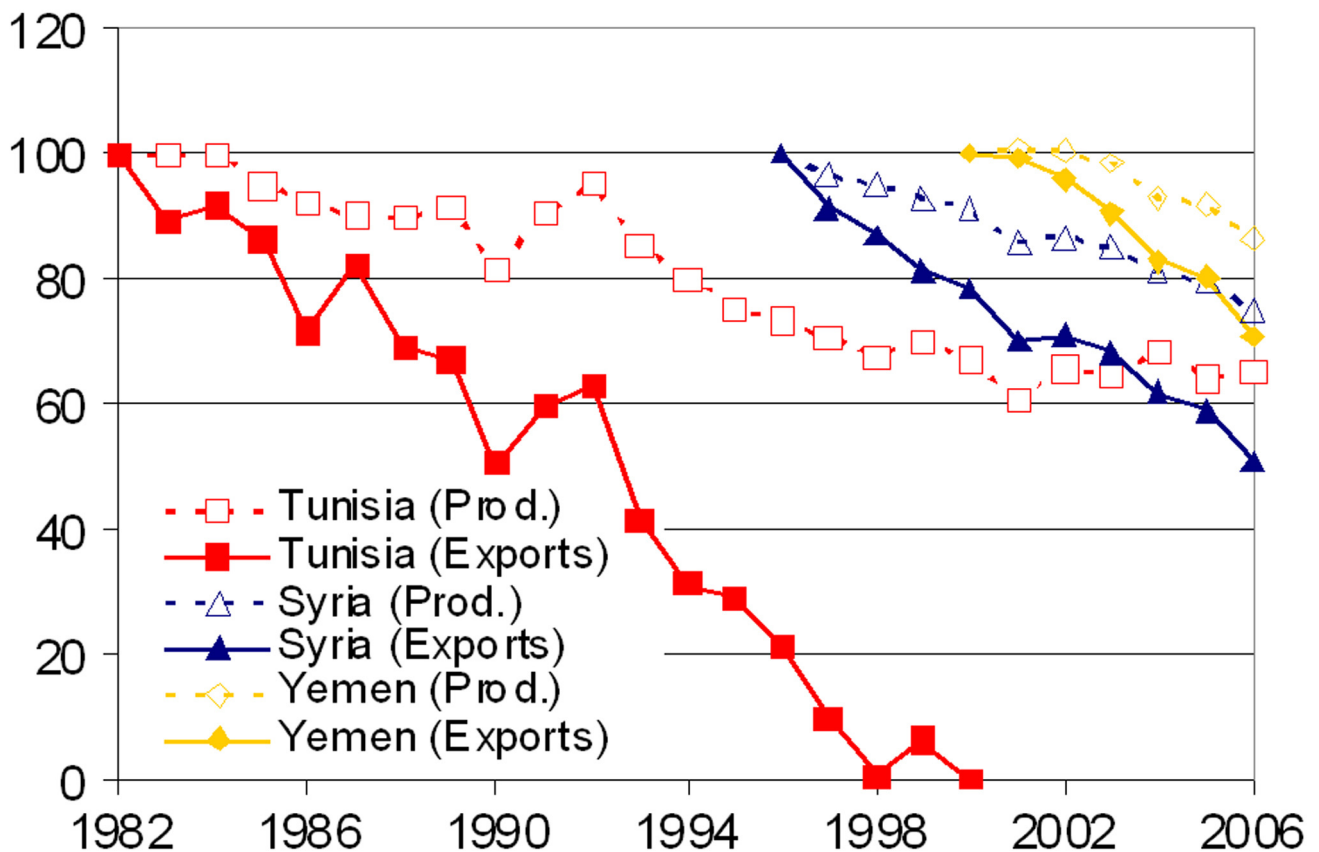


Figure 2: Comparative evolution of oil production and exports for Tunisia, Syria, and Yemen since their peak export (that year, the value 100 is given to production and exports). Graphic built from EIA data about production and consumption.

## 5. Conclusion

As oil supply results from complex interaction between many factors, a few of them having been discussed here, we lack knowledge and hindsight about a phenomenon that never happened in history and will happen only once at a worldwide scale, and oil plays such an important role in our economy, it is prudent to take the precautionary principle seriously by studying the peak oil phenomenon in all its facets, including consequences and solutions.

