







### République française

#### OFFICE PARLEMENTAIRE D'ÉVALUATION DES CHOIX SCIENTIFIQUES ET TECHNOLOGIQUES

# Public hearing, open to press, on

### « INNOVATION AND CLIMATE CHANGE: THE ROLE OF SCIENTIFIC AND TECHNOLOGICAL ASSESSMENT »

This conference hosted by OPECST is held to coincide with the thirtieth anniversary of OPECST's first report and with the French Presidency of EPTA (European Parliamentary Technology Assessment), the European federation of bodies in charge of the scientific and technological assessment for their respective Parliament.

Accredited by the COP21, this conference gathers 150 personalities from 29 different countries (24 European Union countries, Norway, Switzerland, USA, Russia and South Korea) and will provide substantial inputs for the preparation of the next Conference of the Parties held in Paris in December. 27 European parliamentarians have been delegated by their chamber in order to participate in this event.

Its purpose is to discuss, prior to sending conclusions to the COP21 committee, proposals made in the OPECST Green Paper, jointly written by other EPTA members, regarding four key areas in which innovation can contribute to tackling climate change: buildings, the agri-food sector, transports, and citizens' involvement in the use of smart technologies.

### Organized by



Jean-Yves Le Déaut MP, President of OPECST



Bruno Sido Senator, First vice-president of OPECST

Thursday 24 September 2015 8:45 am - 6:30 pm

at National Assembly Salle Lamartine 101 rue de l'Université - Paris 7<sup>ème</sup>



### 8:45-9:45: Opening ceremony

- Mr Claude Bartolone, President of the National Assembly
- Mr Jean-Yves Le Déaut, MP. President of OPECST, and President of EPTA for 2015
- Mr Bruno Sido, Senator, First Vice-President of OPECST
- **Mr Jean Jouzel**, Member of the IPCC, CNRS gold medal recipient, 2007 Nobel prize recipient in the name of GIEC
- Mrs Patricia Lips, Chairwoman of the Committee on Education, Research and Technology Assessment at the German Bundestag

#### **Forecast Introduction**

- Mr Patrick Criqui, Director of research, CNRS: Worldwide assessment of the role of innovation to reduce CO<sub>2</sub> emissions

### 9:45-11:15: FIRST WORKSHOP: INNOVATION FOR ENERGY EFFICIENCY OF BUILDINGS

Chair: Mr Christian Bataille, MP, Vice-president of OPECST, and Mrs Ana Isabel Mariño Ortega, Senator, Chair of the Environmental and Climate Change Committee, Senate, Spain

### **Introductory speeches (3 min. each)**

- How does innovation help energy efficient refurbishment?
- Mr Jean-Yves Le Déaut, co-author, with Senator Marcel Deneux, of an OPECST report on "Regulatory obstacles to innovation in the sector of energy efficient buildings"
- How to better promote eco-friendly construction techniques?
- Mr Lucien Figuier, institutional relations Director, Saint-Gobain
- What is the real impact of energy-efficient buildings in the fight against climate change?
- **Mr Jean-Loup Bertez**, Administrator of La Maison Passive France (The Passive House France)
- The use of regulation mechanisms to insure optimal comfort with minimal energy consumption case study of building 22-28
- Mr Dietmar Eberle, Austrian architect
- How can we accomplish large scale building renovation?
- Mr Sylvain Godinot, Director of the Local Agency for Energy of Lyon
- How do assessment techniques help us choose between renovation and rebuilding?
- **Mr Linas Balsys**, MP, Member of the Environment commission of the Lithuanian Parliament
- The growing importance of agro-materials
- Mr Marcel Deneux, former Senator and former vice-President of OPECST
- Open perspectives for construction techniques based on the physical qualities of materials
- **Mr Marcel van de Voorde,** Professor at Delft University of Technology, Netherlands, Member of the OPECST scientific Council

### Open Debate (2 min. max. per speech; speakers may take the floor multiple times)

### 11:00: New frontiers

- What are the prospects offered by new photovoltaics technologies?
- **Mr Daniel Lincot**, Director of Research, CNRS, the National Superior School of Chemistry (École nationale supérieure de chimie)
- The future of energy storage
- Mr Paul Lucchese, CEA, President of the European research Association on hydrogen

# 11:15-12:45: SECOND WORKSHOP: INNOVATION TO FEED HUMANITY WHILST REDUCING GREENHOUSE GAS EMISSIONS

Chair: Mr Bruno Sido, Senator, First Vice-president of OPECST, and Mr Paul Rübig, MEP, Chairman of STOA (Science and Technology Options Assessment), European Parliament

### **Introductory speeches (3 min. each)**

- Innovation to massively store carbon in the grounds (on the countryside) and on walls and roofs (in cities)
- Mrs Anne-Yvonne Le Dain, MP, Doctor in earth sciences
- Which innovative agronomic techniques can help tackle challenges linked with climate change and population growth?
- Mr Michel Griffon, former scientific Council for Cirad, President of AEI (international Association for green intensive agriculture)
- What are the conditions for frugal innovation to be successful?
- **Mr Jean-Marc Bournigal**, President of Irstea (French National Research Institute of Science and Technology for Environment and Agriculture), VP of AllEnvi (the French research Alliance for environment)
- The contribution of the European space policy to the fight against climate change
- Mr Jean-Yves Le Gall, Chairman of CNES, co-Chairman of the ESA Council
- How could spatial data and modeling contribute to the management of climate change?
- Mr Pascal Lecomte, Head of the Climate Office of ESA (European Space Agency)

### Open debate (2 min. max. per speech; speakers may take the floor multiple times)

### 12:30: New frontiers

- ♦ Can carbon be stored by the means of CO₂ conversion?
- Mrs Christine Mansilla. CEA. I-tésé
- ♦ CO₂ conversion by chemical means: progress
- Mr Vincent César, Researcher, CNRS

### 12:45 : Works break

### 14:40 : 30<sup>th</sup> ANNIVERSARY OF FIRST OPECST REPORT: WHAT ABOUT ACIDIFICATION PROBLEMS. THIRTY YEARS AFTERWARDS?

- PROBLEMS, THIRTY YEARS AFTERWARDS?
  Mr Christer Ågren, Director of the Air Pollution and Climate Secretariat, AirClim (Sweddish NGO)
- Mr Guy Landmann, Assistant Manager, GIP ECOFOR

## 15:00-16:30: THIRD WORKSHOP: INNOVATION FOR TRANSPORTATION AND SUSTAINABLE MOBILITY

Chair. Mr Jean-Paul Chanteguet, MP, Chairman of the Committee of the National Assembly on sustainable Development and territorial Planning, and Mr Rainer Vakra, Chairman of the Committee on Environment of the Estonian Parliament

### **Introductory speeches (3 min. each)**

- Which innovations are necessary to promote new mobilities?
- **Mr Denis Baupin**, MP, co-author, with Senator Fabienne Keller, of the OPECST report: "New smooth and sustainable mobilities: the conception of ecological vehicles"
- Which energies for which motor and engine technologies?
- Mr Pierre-René Bauquis, former Director "Strategy and Planning" of Total

- How to assess the environmental impact and energy efficiency of different fuel types?
- **Mr Linas Balsys**, MP, Member of the Environmental commission of the Lithuanian Parliament
- How to evaluate current social trends in transportation?
- Mr Jean-Pierre Orfeuil, Urbanist, Institut pour la ville en mouvement (City on the Move)
- Eco-efficient transport as a means to reduce dependence on petroleum imports and search for solutions to climate change
- **Mr Theodoros Karapiperis**, Head of Unit, Scientific Foresight Unit (STOA), European Parliamentary Research Service (EPRS), European Parliament
- Norwegian experiences in the transport sector: zero emissions and new solutions for the maritime sector
- **Mr Ola Elvestuen**, MP, Chairman of the Standing Committee on Energy and the Environment of the Norwegian Parliament
- 2I/100 km car for everybody
- Mr Didier Houssin, Chairman of IFP Energies nouvelles

### Open debate (2 min. max. per speech; speakers may take the floor multiple times)

### 16:20 : New frontiers

- ♦ How to promote new patterns of sustainable mobility?
- Mr Georges Amar, Sociologist
- **Mr Michael Nentwich**, Austrian Institute of Technology Assessment: Socioeconomic aspects of sustainable mobility

# 16:30-18:00: FORTH WORKSHOP: CITIZENS' INVOLVEMENT IN THE USE OF SMART TECHNOLOGIES

Chair: Mrs Dominique Gillot, Senator, Member of OPECST, and Mrs Mathilda Ernkrans, Chair of the Committee on Environment and Agriculture, Riksdagen, Sweden

### **Introductory speeches (3 min. each)**

- Can information, training and education improve people's habits?
- Mr Didier Mulnet, Blaise Pascal University of Clermont-Ferrand, Laboratoire Acté
- Are regulation and fiscal policies the only means to fight against climate change?
- **Mr Bernard Tardieu**, President of the Committee on Energy and Climate Change at the French Academy of Technologies
- How can citizens take part in active energy management and new means of transportation?
- Mr Étienne Klein, Head of the Scientific Research on Matter Laboratory, CEA, Member of the OPECST scientific Council
- How does taking part in the decision process influence personal, day-to-day involvement?
- Mr Thierry Touchais, General Manager, Good Planet Foundation
- The contribution of creative economy
- Mr Mikko Alatalo. MP. Member of the Committee for the Future of the Finnish Parliament
- Citizens' involvement
- **Pr Lord Julian Hunt of Chesterton**, Member of the United Kingdom House of Lords *Citizen deliberations: promises and risks*
- Mr Gérald Bronner, sociology Professor at Paris-Diderot University, Member of the OPECST scientific Council, Member of the French Academy of technologies

Role of NGOs in the preparation of COP21

- Mrs Alissa Scholl, Lawyer and Member of the NGO Islands First

- Involvement of the public in science
- Mrs Melanie Peters, Director of the Rathenau Instituut (Netherlands)
- Role of the researchers and of the society. From the citizens to the players
- Mr Patrick Monfort, General Secretary of the National Trade Union of Scientific Researchers (SNCS-FSU)
- The Status of research on citizen involvement
- Mr Alain Fuchs, President of CNRS, President of Alliance Athena
- Reflexions of the National Consultative Ethics Committee
- Mr Jean-Claude Ameisen, President of the National Consultative Ethics Committee

### Open debate (2 min. max. per speech; speakers may take the floor multiple times)

### 17:50: New frontiers

- Assessment of associative, regional or national experiences on citizens' involvement regarding innovation in building, transportation and agriculture
- Mr Lars Klüver, Danish Board of Assessment
- The Mobidix experiment: Feedback on the effectiveness of different methods of citizen involvement
- Mr Alain Rallet, Economist, University of Paris-Sud

### 18:00: Conclusion and presentation of EPTA's green paper

- Mr Pierre Laffitte, former Senator, former vice-president of OPECST: Concluding remarks on the role of OPECST
- Mr Jean-Yves Le Déaut, MP, President of OPECST, President of EPTA for 2015: EPTA's contribution for the COP 21 Agenda of solutions

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Created by law n° 83-609 of July 8th 1983, the Parliamentary Office for Evaluation of Scientific and Technological Options works well upstream of the legislative process with the aim of informing and enlightening decisions made in Parliament and strives to present its work in such a way that it can be directly used for legislative work or budgetary debates.

The Office is a joint delegation of the two assemblies, consisting of eighteen deputies and eighteen senators, selected in such a way as to ensure proportional representation of the different political groups.

The Office is assisted in its work by a Scientific Committee made up of 24 leading people chosen for their expertise in scientific and technical fields.

#### **COMPOSITION OF OPECT**

### **President** Mr Jean-Yves LE DÉAUT, MP

**First Vice-president** Mr Bruno SIDO, Senator

#### **Vice-presidents**

Mr Christian BATAILLE, MP Mrs Anne-Yvonne LE DAIN, MP Mr Jean-Sébastien VIALATTE, MP Mr Roland COURTEAU, Senator Mr Christian NAMY, Senator Mrs Catherine PROCACCIA, Senator

#### **MPs**

Mr Gérard BAPT Mr Christian BATAILLE Mr Denis BAUPIN Mr Alain CLAEYS Mr Claude de GANAY Mrs Françoise GUEGOT Mr Patrick HETZEL Mr Laurent KALINOWSKI Mr Jacques LAMBLIN Mrs Anne-Yvonne LE DAIN Mr Jean-Yves LE DÉAUT Mr Alain MARTY Mr Philippe NAUCHE Mrs Maud OLIVIER Mrs Dominique ORLIAC Mr Bertrand PANCHER Mr Jean-Louis TOURAINE Mr Jean-Sébastien VIALATTE

### **SENATORS**

Mr Patrick ABATE Mr Gilbert BARBIER Mrs Delphine BATAILLE Mr Michel BERSON Mrs Marie-Christine BLANDIN Mr François COMMEINHES Mr Roland COURTEAU Mrs Dominique GILLOT Mr Alain HOUPERT Mrs Fabienne KELLER Mr Jean-Pierre LELEUX Mr Gérard LONGUET Mr Jean-Pierre MASSERET Mr Pierre MÉDEVIELLE Mr Christian NAMY Mrs Catherine PROCACCIA Mr. Daniel RAOUL Mr Bruno SIDO