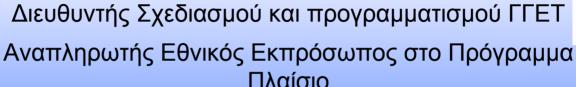
Ημερίδα παρουσίασης των προγραμμάτων «Ενέργεια», «Ιδέες», «Ερευνητικές Υποδομές» και «Έρευνα προς όφελος των ΜΜΕ» του 7ου Προγράμματος Πλαίσιο για την έρευνα της ΕΕ

04, Ιουλίου 2008, Εθνικό Ίδρυμα Ερευνών, Αμφιθέατρο Λ. Ζέρβας

### ΔΥΝΑΤΟΤΗΤΕΣ ΣΥΜΜΕΤΟΧΗ ΣΤΟ 7° ΠΡΟΓΡΑΜΜΑ ΠΛΑΙΣΙΟ ΤΗΣ Ε.Ε. ΣΤΟΝ ΤΟΜΕΑ ΤΗΣ ΕΝΕΡΓΕΙΑΣ ΓΙΑ ΤΟ 2008



Π. Χατζηνικολάου,









### Περιεχόμενα

- Αλλαγές από το FP6 στο FP7
- Θεματικές Περιοχές του FP7 σχετικές με τον τομέα Ενέργεια για το 2008
- Ανοιχτές προσκλήσεις του FP7 σχετικές με τον τομέα Ενέργεια για το 2008

### Αλλαγές από το FP6 στο FP7

- Τα νέα στοιχεία που εισάγει το FP7 είναι :
  - Έμφαση στις θεματικές περιοχές αντί στα μέσα επίτευξης
  - Απλούστευση διαδικασιών
  - Εστίαση στην ανάπτυξη έρευνας που ανταποκρίνεται στις ανάγκες της Ευρωπαϊκής βιομηχανίας μέσω των Τεχνολογικών Πλατφορμών και των νέων Κοινών Τεχνολογικών Πρωτοβουλιών
  - Δημιουργία του Ευρωπαϊκού Συμβουλίου Έρευνας
  - Ενσωμάτωση της Διεθνούς Συνεργασίας στα τέσσερα προγράμματα του FP7
  - Δημιουργία Περιφερειών Γνώσης
  - Χρηματοδοτικός Οργανισμός Επιμερισμού Ρίσκου με σκοπό την ενίσχυση ιδιωτικών επενδύσεων στην έρευνα

### Θεματικές Περιοχές του FP7 σχετικές με την Ενέργεια και την Έρευνα

		Προϋπολογισμός:
•	EΝΕΡΓΕΙΑ	2.3 B€ (2007 - 2013)
	ΠΕΡΙΒΑΛΛΟΝ (συμπεριλαμβανομένης της αλλαγής του κλίματος)	1.8 B€ (2007 - 2013)
•	ΥΠΟΔΟΜΕΣ ΕΡΕΥΝΑΣ	1,8 B€ (2007 - 2013)
•	ΠΕΡΙΦΕΡΕΙΕΣ ΤΗΣ ΓΝΩΣΗΣ	126 M€ (2007 - 2013)
	ΕΝΣΩΜΑΤΩΣΗ ΤΗΣ ΕΠΙΣΤΗΜΗΣ ΣΤΟΝ ΚΟΙΝΩΝΙΚΟ ΙΣΤΟ	280 M€ (2007 - 2013)
	ΥΠΟΣΤΗΡΙΞΗ ΤΗΣ ΣΥΝΕΚΤΙΚΗΣ ΑΝΑΠΤΥΞΗΣ ΤΩΝ ΠΟΛΙΤΙΚΩΝ ΕΡΕΥΝΑΣ	70 M€ (2007-2013)

### Στόχοι Προγράμματος Συνεργασία/Ενέργεια για το 2008

Η έρευνα, ανάπτυξη και επιδεικτική δράση του προγράμματος στοχεύει στην :

- Βελτίωση του βαθμού απόδοσης των ενεργειακών συστημάτων λαμβάνοντας υπόψη την περιβαλλοντική επίδοση
- Επιτάχυνση της διείσδυσης των ΑΠΕ
- Απο-ανθρακοποίηση της παραγωγής ενέργειας και σε μακροπρόθεσμο στάδιο και του τομέα των μεταφορών
- Μείωση των εκπομπών αερίων του θερμοκηπίου
- Διαφοροποίηση του Ευρωπαϊκού ενεργειακού μίγματος
- Αύξηση της ανταγωνιστικότητας της Ευρωπαϊκής βιομηχανίας,
   συμπεριλαμβάνοντας την καλύτερη εμπλοκή των
   ΜΜΕπιχειρήσεων

### Συμμετοχή στο FP7/Ενέργεια/2008

Δομή προσκλήσεων συμμετοχής για το 2008 στον τομέα της ενέργειας

- Γενικό πρόγραμμα GP7-ENERGY-2008-1
- Συνεργασία με την Ρωσία FP7-ENERGY-2008-RUSSIA
- Μελλοντικές αναδεικνυόμενες Τεχνολογίες FP7-ENERGY-FET
- Συνεργασία με την προκήρυξη νανοτεχνολογίας και νέων υλικών για ενεργειακές εφαρμογές
- Συμπληρωματικές δράσεις στον τομέα της Πληροφορικής και
   Επικοινωνιών με στόχευση στην ενεργειακή απόδοση

### **ACTIVITY ENERGY.1: HYDROGEN AND FUEL CELLS**

Topics expected to be defined by Joint Technology Initiative (JTI). In case of delay of the start up of JTI, a separate call may be published by the Commission.

### **ACTIVITY ENERGY.2: RENEWABLE ELECTRICITY GENERATION**

**AREA ENERGY.2.1: PHOTOVOLTAICS** 

AREA ENERGY.2.2: BIOMASS

**AREA ENERGY.2.3: WIND** 

**AREA ENERGY.2.4: GEOTHERMAL** 

AREA ENERGY.2.5: CONCENTRATED SOLAR POWER

AREA ENERGY.2.6: OCEAN AREA ENERGY.2.7: HYDRO

Topic ENERGY.2008.2.1.1: Enhancing strategic international cooperation initiatives in the field of concentration photovoltaics

Topic ENERGY.2008.2.2.1: Enhancing strategic international cooperation with Russia in the field of power generation from biomass

Topic ENERGY.2008.2.7.1: Pre-normative research for hydropower

AREA ENERGY.2.8: INNOVATIVE INTEGRATION OF RENEWABLE ENERGY SUPPLY AND ENERGY EFFICIENCY IN LARGE BUILDINGS AND/OR CONCERTO COMMUNITIES

**AREA ENERGY.2.9: CROSS-CUTTING ISSUES** 

### **ACTIVITY ENERGY.3: RENEWABLE FUEL PRODUCTION**

#### AREA ENERGY.3.1: FIRST GENERATION BIOFUEL FROM BIOMASS

AREA ENERGY.3.2: SECOND GENERATION FUEL FROM Topic ENERGY.2008.3.2.1: Enhancing international **BIOMASS** 

cooperation between the EU and Latin America in the field of biofuels

AREA ENERGY.3.3: BIOREFINERY

AREA ENERGY.3.4: BIOFUELS FROM ENERGY CROPS

AREA ENERGY.3.5: ALTERNATIVE ROUTES TO RENEWABLE FUEL PRODUCTION

AREA ENERGY.3.6: BIOFUEL USE IN TRANSPORT

AREA ENERGY.3.7: CROSS-CUTTING ISSUES

### **ACTIVITY ENERGY.4: RENEWABLES FOR HEATING AND COOLING**

AREA ENERGY.4.1: LOW/MEDIUM TEMPERATURE SOLAR THERMAL ENERGY

AREA ENERGY.4.2: BIOMASS

AREA ENERGY.4.3: GEOTHERMAL ENERGY

AREA ENERGY.4.4: INNOVATIVE INTEGRATION OF RENEWABLE ENERGY SUPPLY AND ENERGY

EFFICIENCY IN LARGE BUILDINGS AND/OR CONCERTO COMMUNITIES

**AREA ENERGY.4.5: CROSS-CUTTING ISSUES** 

# ACTIVITY ENERGY.5: CO2 CAPTURE AND STORAGE TECHNOLOGIES FOR ZERO EMISSION POWER GENERATION

**AREA ENERGY.5.1: CO2 CAPTURE** 

AREA ENERGY.5.2: CO2 STORAGE

Topic ENERGY.2008.5.2.1: CO2 Capture and Storage – Capacity building with the large emerging economies

**Topic ENERGY.2008.5.2.2 : CO2 transport and storage infrastructure development** 

**Topic ENERGY.2008.5.2.3:** CO2 capture and storage - public acceptance

Topic ENERGY.2008.5.2.4: Development of a suitable methodology for the qualification of deep saline aquifers for CO2 storage

### **ACTIVITY ENERGY.6: CLEAN COAL TECHNOLOGIES**

AREA ENERGY.6.1: CONVERSION TECHNOLOGIES FOR ZERO EMISSION POWER GENERATION

AREA ENERGY.6.2: COAL-BASED POLY-GENERATION

CROSS-CUTTING ACTIONS BETWEEN ACTIVITIES

**ENERGY.5 AND ENERGY.6 (Activity ENERGY.5&6)** 

AREA ENERGY.5&6.1: POWER GENERATION TECHNOLOGIES FOR INTEGRATED ZERO EMISSION

**SOLUTIONS** 

AREA ENERGY.5&6.2: CROSS CUTTING AND REGULATORY ISSUES

### **ACTIVITY ENERGY.7: SMART ENERGY NETWORKS**

AREA ENERGY.7.1: DEVELOPMENT OF INTER-ACTIVE Topic ENERGY.2008.7.1.1: Open-access Standard for DISTRIBUTION ENERGY NETWORKS

AREA ENERGY.7.2:

**NETWORKS** 

PAN-EUROPEAN

**Smart Multi-Metering Services** 

**ENERGY Topic ENERGY.2008.7.2.1: Innovative operational and** monitoring tools for large power systems

> Topic ENERGY.2008.7.2.2: Innovative concepts and technologies for sustainable gas networks

### **ACTIVITY ENERGY.8: ENERGY EFFICIENCY AND SAVINGS**

AREA ENERGY.8.1: EFFICIENT ENERGY USE IN THE Topic ENERGY.2008.8.1.1: Energy efficiency of MANUFACTURING INDUSTRY industrial heat exchangers and boilers

AREA ENERGY.8.2: HIGH EFFICIENCY POLY-GENERATION

AREA ENERGY.8.3: LARGE-SCALE INTEGRATION OF RENEWABLE ENERGY SUPPLY AND ENERGY EFFICIENCY IN BUILDINGS: ECO-BUILDINGS

AREA ENERGY.8.4: INNOVATIVE INTEGRATION OF RENEWABLE ENERGY SUPPLY AND ENERGY EFFICIENCY IN LARGE COMMUNITIES: CONCERTO

AREA ENERGY.8.5: INNOVATIVE STRATEGIES FOR CLEAN URBAN TRANSPORT: CIVITAS-PLUS

AREA ENERGY.8.6: SOCIO-ECONOMIC RESEARCH AND INNOVATION

AREA ENERGY.8.7: THEMATIC PROMOTION AND DISSEMINATION

### ACTIVITY ENERGY.9: KNOWLEDGE FOR ENERGY POLICY MAKING

AREA ENERGY.9.1: KNOWLEDGE TOOLS FOR ENERGY-RELATED POLICY MAKING

AREA ENERGY.9.2: SCIENTIFIC SUPPORT TO POLICY

### **ACTIVITY ENERGY.10: HORIZONTAL PROGRAMME ACTIONS**

Topic ENERGY.2008.10.1.1: Future Emerging Technologies (FET)

Topic ENERGY.2008.10.1.2: Novel materials for energy applications (Joint Call NMP)

Topic ENERGY.2008.10.1.3: Trans-national cooperation among NCPs

 Area 2/1: Renewable Electricity generation / Photovoltaics

Topic 2/1/1: Enhancing Strategic International Cooperation Initiatives in the field of Concentration Photovoltaics

Content and scope: international cooperation on concentration PV with Mediterranean countries, e.g. field testing, common materials databases, inter-comparison of system components

Funding scheme: CP with predominant research component

Expected impact: accelerated development of this still small but emerging and promising sector

Other information: SICA focused on Mediterranean partner countries, which may receive Community funds. USA and Australia also welcomed. Max one project will be funded

## Area 2/7: Renewable Electricity generation / Hydro

Topic 2/7/1: Pre-normative research for hydropower

Content and scope: prenormative research aiming at harmonised testing methods and comparative assessment of small hydropower installations, particularly those based on new technologies and designs (e.g. for environmental and/or socio-economic impact assessment)

Funding scheme: CP

Expected impact: Harmonised testing and assessment; matching designs with various environments; accelerate rate of development

Other information: active participation of SMEs; ability to interact with relevant stakeholders. Max one project will be funded

# Area 3/2: Renewable Fuel Production / 2<sup>nd</sup> Generation Fuel from Biomass

Topic 3/2/1: Enhancing international cooperation between the EU and Latin America in the field of biofuels

Content and scope: EU-LA coop. on biofuels including characterisation of feedstock and pre-treatment technology, optimisation of 1<sup>st</sup> and 2<sup>nd</sup> generation biofuels, sustainability issues and coproduction of bioproducts

Funding scheme: CP with predominant research component

Expected impact: enhanced cooperation between key researchers and industries from Eu and LA

Other information: SICA; balanced consortium. Solid experience and management skills in international context; adding value to existing EU-LA collaborations in the field

### Area 5/2: CO2 Capture and storage / Storage

Topic 5/2/1: CCS capacity building with the large emerging economies (EE)

Content and scope: research aimed at first global estimate of the CO2 storage capacity in large EE, matching sources and sinks and identification of a few potential storage sites for large emission point sources. Capacity building in CCS inc. development of transport infrastructure

Funding scheme: CP

Expected impact: allow deployment of zero emission fossil fuel based power plants in large EE with sufficient pre-requisite knowledge (CO2 storage potential) and technical know-how

Other information: SICA; balanced partnership between EU and Large EE members of the CSLF; institutions from developed countries also members of CSLF welcomed

### Area 5/2: CO2 Capture and Storage / Storage

Topics 5/2/2: CO2 Transport and storage infrastructure development

Content and scope: work should cover the infrastructure needed to collect CO2 from large point sources, the intermediate short term storage technologies, the large scale compression installations and the final injection facilities, both on-shore and off-shore. It should address the societal, legal, environmental, financial and technical aspects.

Funding scheme: CP

Expected impact: facilitating the large scale deployment of zero emission plants by generating the necessary knowledge associated with all steps between capture and final repository

Other information: Max one project will be funded

# Area 5/2: CO2 Capture and Storage / Storage

Topic 5/2/3: CCS – Public acceptance

Content and scope: to aim is to study the acceptance of CO2 capture and storage technologies in the general public. Work should cover the information needs, the impact of the information given, the role of opinion shapers, as well as the local dimension of acceptance compared to the more abstract general perception

Funding scheme: CSA – support type

Expected impact: The project should facilitate the large scale deployment of zero emission power plants in the EU

Other information: Max one project will be funded

## Area 5/2: CO2 Capture and Storage / Storage

Topic 5/2/4: Development of a suitable methodology for the qualification of deep saline aquifers for CO2 storage

Content and scope: development of a suitable methodology to assess the quality of a given site and of common generic methodology to address the various criteria put in place by the legal authorities in view of conforming to certification procedure

Funding scheme: CP with predominant research component

Expected impact: deliver site qualification methodologies serving the regulatory process; contribute to the use of deep saline aquifers for CO2 storage in Europe; ease the penetration of fossil fuel based zero emission power plants

Other information: establishing connection with appropriate specific CO2 storage sites emerging in Europe; participation of members of CSLF is encouraged

Area 7/1: Smart Energy Networks / Interactive distribution energy networks

### Topic 7/1/1: Open-access standard for smart multi-metering services

Content and scope: address knowledge gaps for the adoption of open-standards, capable of guarantying the interoperability of systems and devices and the large scale adoption of smart multi-metering equipments, potentially covering electricity, gas and any other network service and commodity. Consider all relevant aspects (definition of protocols, data formats, ...) and functions (remote (re-)connection; flexible tariff management, etc.)

Funding scheme: CP

Expected impact: opening-up of the market of smart multi-metering systems enabling active customer participation and EU leadership

Other information: balanced partnership between network industries, equipment suppliers, research centres and regulatory and standards bodies. Max one project will be funded

 Area 7/2: Smart Energy Networks / Pan-European Energy networks

Topic 7/2/2: Innovative concepts and technologies for gas networks

Content and scope: Research for the development of innovative concepts and technologies for reliable and flexible European gas networks, tackling for example the integration of renewable energy alternatives into the networks, novel solutions for monitoring and maintenance

Funding scheme: CP with a predominant R&D component

Expected impact: open new pathways for sutainable gas networks, while addressing the pressing challenges of security of supply and climate change

 Area 8/1: Energy Efficiency and Savings / Efficient Energy Use in Manufacturing Industry

Topic 8/1/1: Energy efficiency of industrial heat exchangers and boilers

Content and scope: Long term generic RTD to increase significantly the efficiency of heat exchangers and boilers as key equipment components in a number of industrial sectors, involving disciplines such as material sciences, thermodynamics, fluid dynamics and engineering

Funding scheme: CP with predominant R&D component

Expected impact: significantly increase energy efficiency in a number of industrial sectors

Other information: SMES expected to be active participants

## Activity 10: Horizontal Programme Actions

Topic 10/1/3: Trans-national cooperation among National Contact Points (NCPs)

Content and scope: reinforcing the FP7-Energy network of NCPs through promotion of transnational cooperation, sharing of information and good practices, involving mechanisms such as benchmarking exercises, joint workshops, training activities, cross-border brokerage events. Approach adapted to the theme and NCPs concerned. Special attention to "new comers"

Funding scheme: CSA – Coordination

Expected impact: improved NCP services across Europe thereby opening up and raising quality and effectiveness of participation in FP. Possibly also considering INCO aspects

Other information: single 12-months duration proposal involving officially appointed NCPs, plus 3rd country where mutually beneficial

# Ανοικτές προσκλήσεις ενδιαφέροντος για το 2008

1 FP7-ENERGY-2008-1: Energy Call Part 1 2 FP7-ENERGY-2008-FET: Energy FET Call 3 FP7-ENERGY-2008-RUSSIA: Energy EU-Russia Call 4 FP7-ENERGY-NMP-2008-1: Joint Energy NMP Call	Energy Energy Energy Energy, Nanosciences, Nanotechnologies, Materials and new Production Technologies	26-Feb-08
5 FP7-ENERGY-2008-1: Energy Call Part 1 6 FP7-ENERGY-2008-FET: Energy FET Call 7 FP7-ENERGY-NMP-2008-1: Joint Energy NMP Call	Energy (*) Energy (*) Energy , Nanosciences, Nanotechnologies, Materials and new Production Technologies (*)	29-May-08
8 FP7-ERANET-2008-RTD: ERA-NET / ERA-NET PLUS Call 2008	Coordination of Research Activities , Security , Space , Socio-economic sciences and Humanities , Transport (including Aeronautics) , Environment (including Climate Change) , Energy , Nanosciences, Nanotechnologies, Materials and new Production Technologies , Information and Communication Technologies , Food, Agriculture and Fisheries, and Biotechnology , Health	12-Aug-08

<sup>(\*) [</sup>Stage 2 (only for proposals retained at stage 1)]

### Διαδικασία αξιολόγησης προτάσεων

Οι προτάσεις που αφορούν τα FP7-ENERGY-2008-1, FP7-ENERGY-FET-2008-1 και FP7-ENERGY-NMP2008-1 θα υποβληθούν και θα αξιολογηθούν σε δύο στάδια :

### Στάδιο 1 «γενική περιγραφή πρότασης»

- •Ημερομηνία υποβολής 26/2/2008
- •Περιγραφή των Επιστημονικών και Τεχνολογικών στόχων (έως 10 σελ. Α4) και των Συμμετεχόντων και του χρηματοδοτικού σχήματος (έως 2 σελ. Α4)

### Στάδιο 2 «πλήρης πρόταση»

- •Κατόπιν θετικής αξιολογήσεως κατά το πρώτο στάδιο
- •Ενδεικτική ημερομηνία υποβολής 29/5/2008

# Πρόσθετες δυνατότητες υποβολής προτάσεων

	Indicative Budget	Expected	Indicative
Subject (Indicative title)	in Euros	duration	timetable
Establish an umbrella structure in order to finalise and ensure further coordination of the EU Flagship Programme in the area of sustainable power generation from fossil fuels with CO2 Capture and Storage.	One contract EUR 3 million	3 years	First Quarter 2008
Development of a set of energy research indicators in order to create a common understanding of the state of the art and updated research objectives at European level for the whole portfolio of European research.	One Contract EUR 800,000	3 years	Second Quarter 2008
Monitoring and mapping energy research activities at the EC, EU and global level.	One contract EUR 700,000	3 years	Second Quarter 2008
Support to the coordination of the European Strategic Energy Technology (SET) Plan (support to carry out specific analyses needed to develop the SET-Plan).	One contract EUR 200,000	9 months	Second Quarter 2008
Support to the Impact Assessment of the governance alternatives for the European Strategic Energy Technology Plan (SET-Plan)	One contract EUR 250,000	6 months	Second Quarter 2008
Financing low carbon energy technologies development, market take up and early deployment – needs; sources; limitations; and public private partnerships	One contract EUR 250,000	9 months	First Quarter 2008

# Ενδεικτική κατανομή χρηματοδότησης

### 2008

Call/ Activity	RTD	TREN	
ED7 ENEDCY 2000 1			٦ "
FP7-ENERGY-2008-1 FP7-ENERGY-2008-RUSSIA	26.3		) (N
FP7-ENERGY-2008-FET	15		1
FP7-ENERGY-NMP-2008-1	15		
<b>General Activities</b>	2.015	2.1	
Other Activities	2.95	3.15	
<b>Evaluation Cost</b>	1		
Extimated total budget allocation	66.265	5.25	

## Αναφορές

- "Research Priorities, Objectives and Topics for the 2008 General Call", Bruno Schmitz, DG RTD, European Commission, EC-INFO DAY 2008 ENERGY CALL Brussels, 19 December 2007
- WORKPROGRAMME 2008, COOPERATION, THEME 5 ENERGY, European Commission C92007) 5765 of 29 November 2007
- Information from www.cordis.lu