



***FP7 Programme Principles***

***EU-RU Cooperation***

***Opportunities***

***Topics of common interest***

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**Energy Directorate**



# The Project Life Cycle





# Preparation of Work Programmes

- û **Annual process**
- û **Following consultation and expert advice:**
  - ü Advisory Groups
  - ü European Technology Platforms
  - ü Open consultations
  - ü Workshops, expert meetings, etc
  - ü Consultation with other Commission directorate generals
- û **Subject to opinion by Programme Committees (Member State representatives)**



# Work Programme Structure

- û The Cooperation Specific Programme constitutes the legal base
  - û New for FP7: Annual Work Programmes
  - û Nomenclature:
    - Æ **Theme (Energy)**
      - Æ **Activity (correspond to the nine bullet points of the SP)**
        - Æ **Area** (intended to be stable throughout FP7, but with flexibility)
          - Æ **Topic (subjects open for proposals in the calls only in the year in question – change each year)**
- F Focus only on calls to be published in the coming year



# Energy Theme



**Hydrogen and fuel cells**

**CO2 capture and storage  
technologies for zero  
emission power generation**

**Renewable  
electricity  
generation**

**Clean coal  
technologies**

**Renewable  
fuel production**

**Smart energy  
networks**

**Renewables  
for heating and cooling**

**Energy savings  
and energy efficiency**

**Knowledge for energy policy making**



# FP7 Funding Schemes

- = Collaborative Projects (small to medium / large / targeted to specific groups)
- = Networks of Excellence
- = Coordination and Support Actions
- = Support for Frontier Research (ERC)
- = Research for the Benefit of Specific Groups
- = Support for Training and Career Development of Researchers (Marie Curie)
- = Joint Technology Initiatives
- = Joint implementation of national research programmes (Article 169)



# Calls for Proposals



- û **Announced in the OJ (cf FP6)**
- û **Call 'fiches' published on CORDIS**
- û **Set out details of:**
  - ü **Call budget, opening and closing dates**
  - ü **Topics and funding schemes**
  - ü **Eligibility and evaluation criteria (and any deviation from the norms)**
  - ü **Indicative evaluation and contractual timetable**



# The criteria



- û **Criteria adapted to each funding scheme**

- ü specified in the work programme

- û **Divided into three main criteria:**

- ü **S&T Quality** (*relevant to the topic of the call*)

- Ø Concept, objective, work-plan

- ü **Implementation**

- Ø Individual participants and consortium as a whole

- Ø Allocation of resources

- ü **Impact**

- Ø Contribution to expected impacts listed in work programme

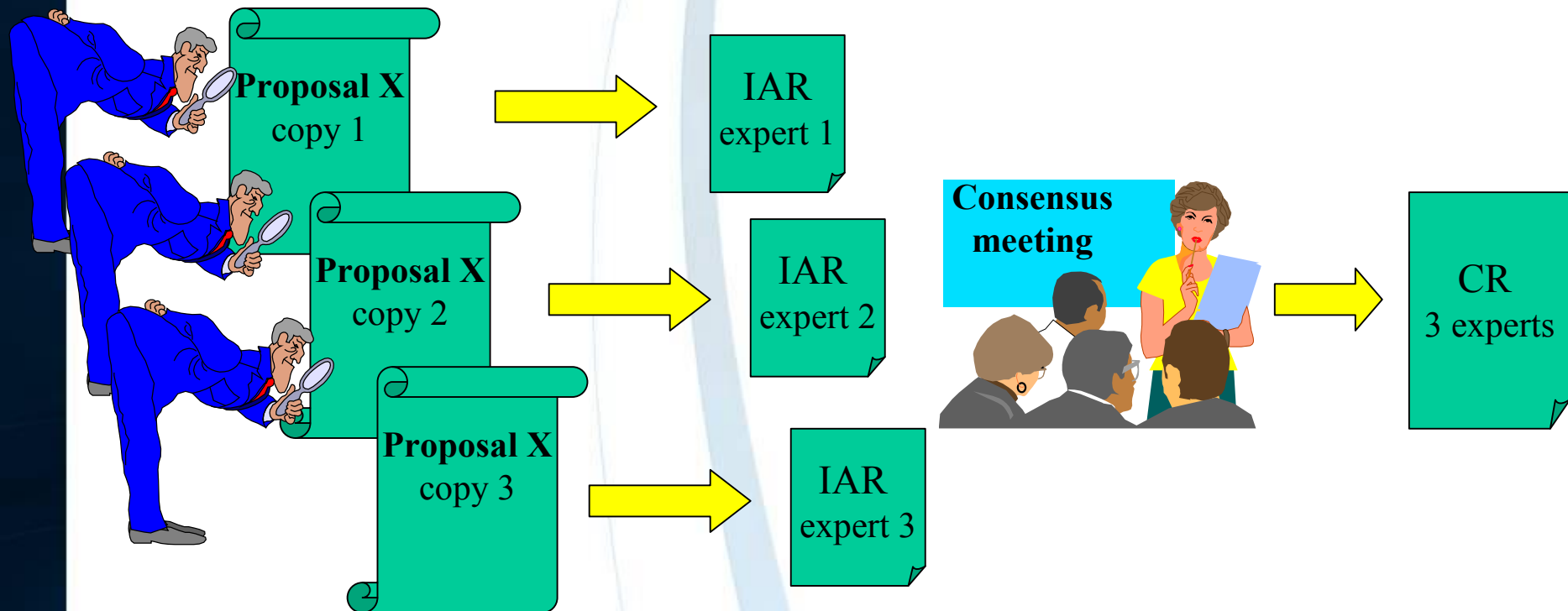
- Ø Plans for dissemination/exploitation





# Evaluation

peer review - independent experts



*Note: There may be more than 3 evaluators*  
IAR=Individual assessment report  
CR=Consensus Report



# Energy theme – joint responsibility

**DG RTD**  
Research

**DG TREN**  
Transport and Energy

**Research**

**Research &  
Demonstration**

**Time frame**  
Longer term

**Time frame**  
Shorter term



# FP7 First Calls

<b>Launch</b> <b>22 Dec 2006</b> <b>Deadline</b> <b>3 May 2007</b>	<b>DG RTD Call</b> <b>FP7-ENERGY-2007-1-RTD</b> <b>Budget 109.3 M€ for 2007</b> <b>(&amp; 35 M€ for 2008?)</b>
<b>Launch</b> <b>22 Dec 2006</b> <b>Deadline</b> <b>28 June 2007</b>	<b>DG TREN Call</b> <b>FP7-ENERGY-2007-2-TREN</b> <b>Budget 128 M€ for 2007</b>
<i>Launch</i> <i>22 Dec 2006</i> <i>Deadline July 2007</i>	<i>ERA-NET Joint Call</i> <i>FP7-ERANET-2007-RTD</i> <i>(Budget 7.5 M€ for 2008)</i>



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# International Co-operation Concrete opportunities 2007 energy programme – 1<sup>st</sup> Call

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Russia-EU Co-operation: 22 February 2007





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# International Cooperation in FP 7

- Aim of International Cooperation in EU RTD:
  - Support **European competitiveness** through strategic partnerships with third countries in selected fields of science and technology
  - Address specific problems that third countries face or that have a global character, on the basis of **mutual interest**

Russia-EU Co-operation: 22 February 2007





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# International Cooperation in the FP7 Energy theme

- Global nature of the energy challenges, threats and opportunities
  - è Sustainable development of energy systems
  - è Security of energy supply and Climate Change

International Cooperation dimension is an increasing important element of the energy research policy



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# International Cooperation in FP 7

- **Third Countries**

- o Industrialised countries (US, Japan, Canada, Australia, New Zealand, Korea)
- o Associated countries
- o International Cooperation Partner Countries (ICPC)
  - o Mediterranean partner Countries,
  - o Western Balkans,
  - o Eastern European and Central Asian countries (inc. Russia)
  - o ACP, ASIA, Latin America



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# International cooperation FP7 'Energy' Work programme

- Reinforcement of the International co-operation as an integrated part of the energy thematic area
  - o 2 Mechanisms for implementation of international cooperation
    - Opening of all activities and topics to international cooperation.
    - Specific International Cooperation Actions (SICA)



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# International cooperation FP7 'Energy' Work programme

- **"Opening"** of all activities to International Cooperation
  - o To build S&T partnerships based on mutual interest
  - o To contribute to Europe's competitiveness
  - o To contribute to implementing other EU policies and international commitments



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# EU - Russia cooperation FP7 'Energy' Work

- **"Opening"** of **programme 1st Call** of activities to cooperation with Russia
  - o **Opening**: all topics are open to the participation of applicants from **Russia**
  - o **Opening +**: topics for which the participation of **Russia** or regions is explicitly encouraged or recommended
  - o Applicants from ICPC such as **Russian organisations** may be funded in general
  - o The Russian partner is in addition to the legal minimum consortium of 3 legal entities MS/AC for collaborative projects or of 1 legal entities MS/AC for CSA



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# EU – Russia Cooperation FP7 'Energy' Work programme 1st Call

- **"Opening + P": A special attention paid to....**
  - o S&T cooperation agreement (inc. Energy) with Russia
  - o EU and Russia are engaged in bi-lateral or multi-lateral strategic dialogues, partnerships or agreement on **Energy RTD**
    - Russia is a targeted ICPC, presenting a clear strategic and/or S&T interest for energy (set up of an EU – Russia WG on energy research)

Russia-EU Co-operation: 22 February 2007

- IPHE, CSLF





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# EU - Russia cooperation

## FP7 'Energy' Work programme 1st Call

"Opening +"

Members IPHE	H <sub>2</sub> and/or FC (1.1.1 – 1.1.2 – 1.2.1 - 1.2.2 – 1.2.4 - 1.3.1)
Russia	Clean Coal-CCS (5&6.2.5) / ERA NET (10.0.1)
Members CSLF	CO <sub>2</sub> Capture & Storage (5&6.2.1)
EECA	Biomass (2.2.3 - 3.7.1)
Neighbouring countries	Energy Networks (7.2.1)



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# International cooperation FP7 'Energy' Work programme 1st Call

- **Specific International Cooperation Actions (SICA)**
  - o Topics especially designed and devoted to the international cooperation with targeted ICPC
  - o Address problems, on the basis of mutual benefit, of shared interest and importance  
e.g. the environment consequences of

Russia-EU Co-operation: 22 February 2007

SEVENTH FRAMEWORK  
PROGRAMME

energy policies energy supply inter-



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# International cooperation FP7 'Energy' Work programme 1st Call

- **Specific International Cooperation Actions (SICA)**

- o Priorities for activities are identified through dialogues with targeted ICPC and based on mutual interest and benefit
- o CP: at least 4 legal entities: 2 MS/AC + 2 ICPC

(For Russia: region for which the minimum participation of 2 "oblast" or provinces does also apply)



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# International cooperation FP7 'Energy' Work programme 1st Call

- **Specific International Cooperation Actions (SICA)**
  - o Four SICAs in 1st Call, only one for which **Russia** may be interested to participate
  - o **Developping/neighbouring countries:**  
Energy technology transfer (CP)
    - Goal: develop model/strategy to assess how better exploit the results from energy research and their take off in developping/neighbouring countries (CDM, JIM, EU poverty eradication)



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# ERA NET (topic 10.0.1) on International cooperation

- **Goal:** Improve International Cooperation on energy RTD matters with targeted ICPC notably **Russia**
- Focus on:
  - Promoting an effective and efficient international scientific EU cooperation strategy at EU level by enhancing collaboration/communication amongst MS and the EU on S&T international Cooperation
  - Supporting the ongoing bilateral S&T cooperation initiatives of MS and/or AS
  - Supporting the implementation of a shared vision on RTD energy strategies by facilitating

Russia-EU Co-operation: 22 February 2007

SIXTH FRAMEWORK  
PROGRAMME

novel programmatic approaches



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# Support Action on International Cooperation (Call for Tenders)

- Action in support to the development and implementation of an EU strategic approach for the S&T cooperation with targeted ICPC including **Russia**
- Objectives/Scope
  - Analyse and bring recommendations on how the EU and the targeted ICPC can benefit from an increasing S&T cooperation
- Organisation and implementation of a dynamic S&T dialogue between Europe and the targeted ICPC around specific energy areas, strategic research, set up of research topics, etc... projects/programmes of common interest and mutual benefits
- Participation of partner(s) from targeted countries required
- Publication of the call: 1st quarter 2007

Russia-EU Co-operation: 22 February 2007





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# EU - Russia cooperation FP7 'Energy' Work programme 1st Call

Please send to me:

[Gilles.lequeux@ec.europa.eu](mailto:Gilles.lequeux@ec.europa.eu)

- Description of your organisation
- Area of expertise
- topic of interest to participate
- Name, tel., E-mail of your contact point



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# EU - Russia cooperation FP7 'Energy' Work

## • Preliminary programme 2d Call

- Revision of WP in 2007:
- Second Call (RTD): 2008
- Indicative Budget: 35 M€
  - topics complementary to those in the first call;
  - areas not well covered by the outcome of the first call;
  - additional topics identified as being strategically important by technology platforms;
  - opportunities for Future and Emerging Technologies (FET), ERA-NETs and Specific International Cooperation Actions (SICA) – EC and RU to deliver !



# Energy Theme



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**Smart energy  
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for heating and cooling**

**Energy savings  
and energy efficiency**

**Knowledge for energy policy making**



# Smart energy networks

To increase the efficiency, flexibility, safety and reliability of the more integrated European electricity and gas networks

## Electricity:

Interactive customers/operators network

Large scale integration of RES

Distributed generation: fuel cells, micro-turbines

Innovative ICT solutions, RES storage, power electronics &

High Temperature Superconducting devices

## Gas:

Intelligent and efficient gas transport and distribution

Integration of RES technologies



# Smart Energy Networks RTD Call

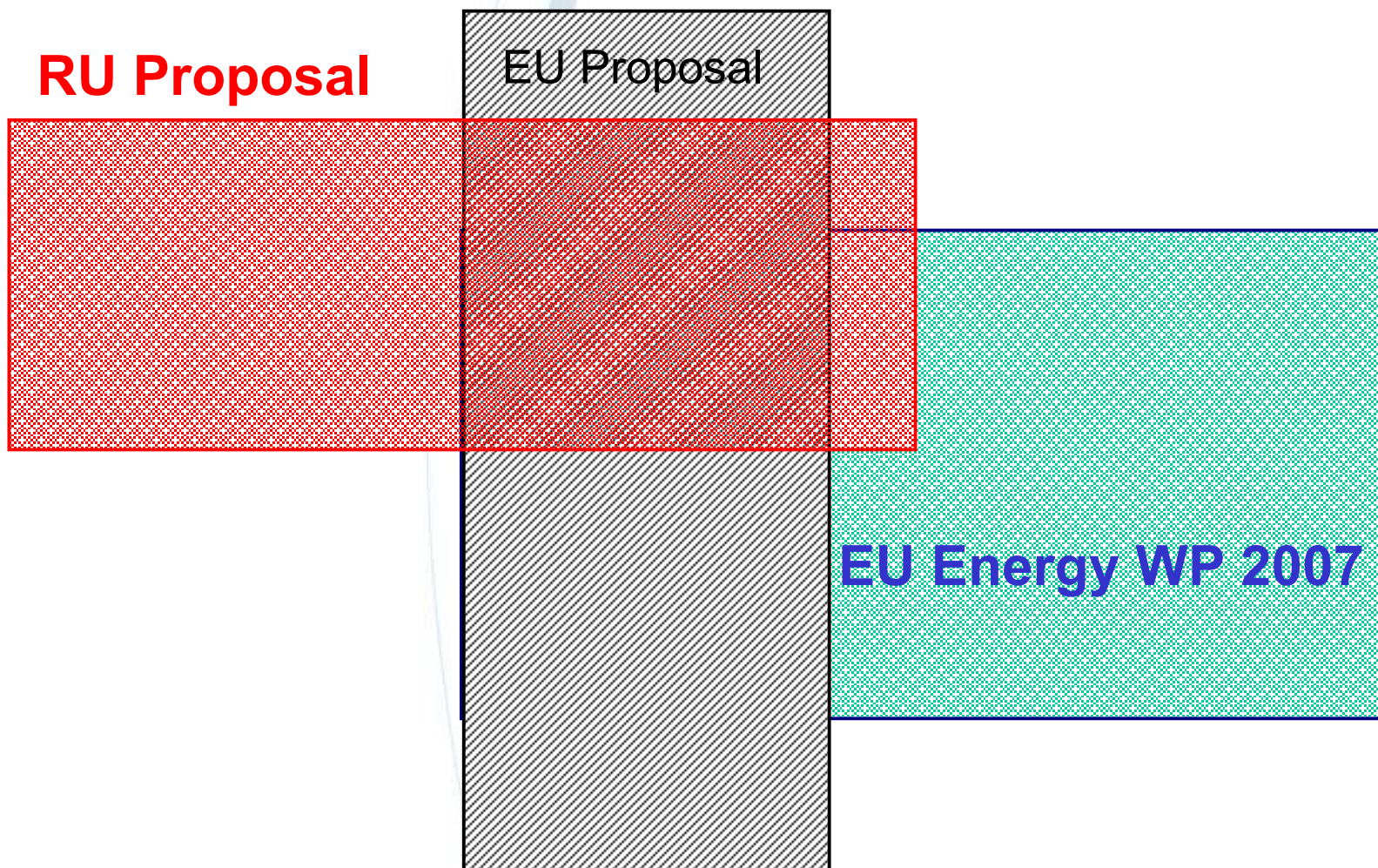
Topic code	Title	Funding scheme
7.1.1	Develop and validate innovative control strategies and network architectures for active networks with large-scale penetration of renewables sources and distributed generation	Large collaborative
7.1.2	Develop new tools to simulate smart distribution networks	Small collaborative
7.2.1	Simulation and state estimation of smart electricity transmission networks	Large collaborative
7.3.1	Electricity network assets management	Coordination action
7.3.2	The value of innovative storage solutions for smart networks	Small collaborative



# Smart Energy Networks TREN Call

Topic code	Title	Funding scheme
7.3.4	Analysis and scenarios of energy infrastructure evolution	Collaborative
7.3.5	More efficient integration of renewable energy into future infrastructures	Collaborative

# EU – RU Common Interest



## RU – EU Topics of Common Interest 1<sup>st</sup> Call

Area	Topic N	Description
H2 & FC	1.3.1	Development of methods and means of ensuring hydrogen safety, development of hydrogen economy-related regulatory documents.
	1.2.4	Safe and efficient systems for solid-state reversible hydrogen storage and purification integrated with fuel cell power units
CO2	5.1.2	Fluid bed based capture techniques
Biomass	2.2.6	Medium size Power Station on biomass (if high tech CHP)



## RU Participation particularly welcome

Area	Topic N	Description
PV	2.1.3	Concentrating photovoltaics Large Collaborative Project (CP)
Biomass	2.2.x 3.x.x	<i>All topics</i>
FC	1.1.1, 1.1.2	Materials for Energy Intensive FC (high temperature FC and PEM FC)
	1.2.4	Materials for H2 solid state storage
	1.3.1	Prenormative research and H2 safety
	1.2.2	New materials and processes for advanced multi-fuel processors
Energy Networks	7.2.1	Simulation and state estimation of smart electricity transmission networks



# Information

Ø **EU research:**

<http://ec.europa.eu/research>

Ø **Seventh Framework Programme:**

<http://ec.europa.eu/research/fp7>

Ø **Information on research programmes and projects:**

<http://www.cordis.lu/>

Ø **RTD *info* magazine:**

<http://ec.europa.eu/research/rtdinfo/>

Ø **Information requests:**

<http://ec.europa.eu/research/enquiries/>

