



THE EU FRAMEWORK PROGRAMME  
FOR RESEARCH AND INNOVATION

# HORIZON 2020

**Secure, Clean and  
Efficient Energy**



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European Commission  
DG Research and Innovation

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Directorate General  
For Energy

**Athens, 24 January 2014**

*Research and  
Innovation*

# Βασικές γραμμές ενεργειακής πολιτικής

## Ανταγωνιστικότητα

Competitiveness

Smart infrastructure

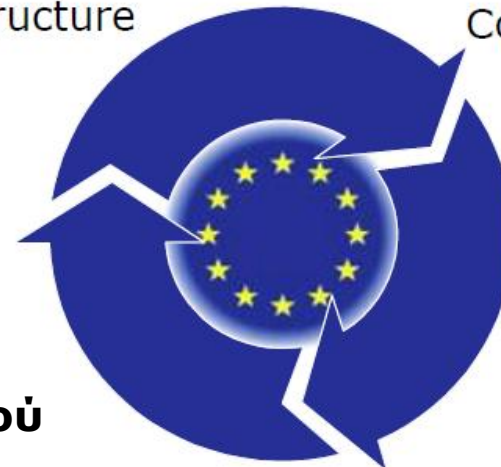
Competitive markets

Diversified supply

Energy efficiency

## Ασφάλεια ανεφοδιασμού

Security of  
supply

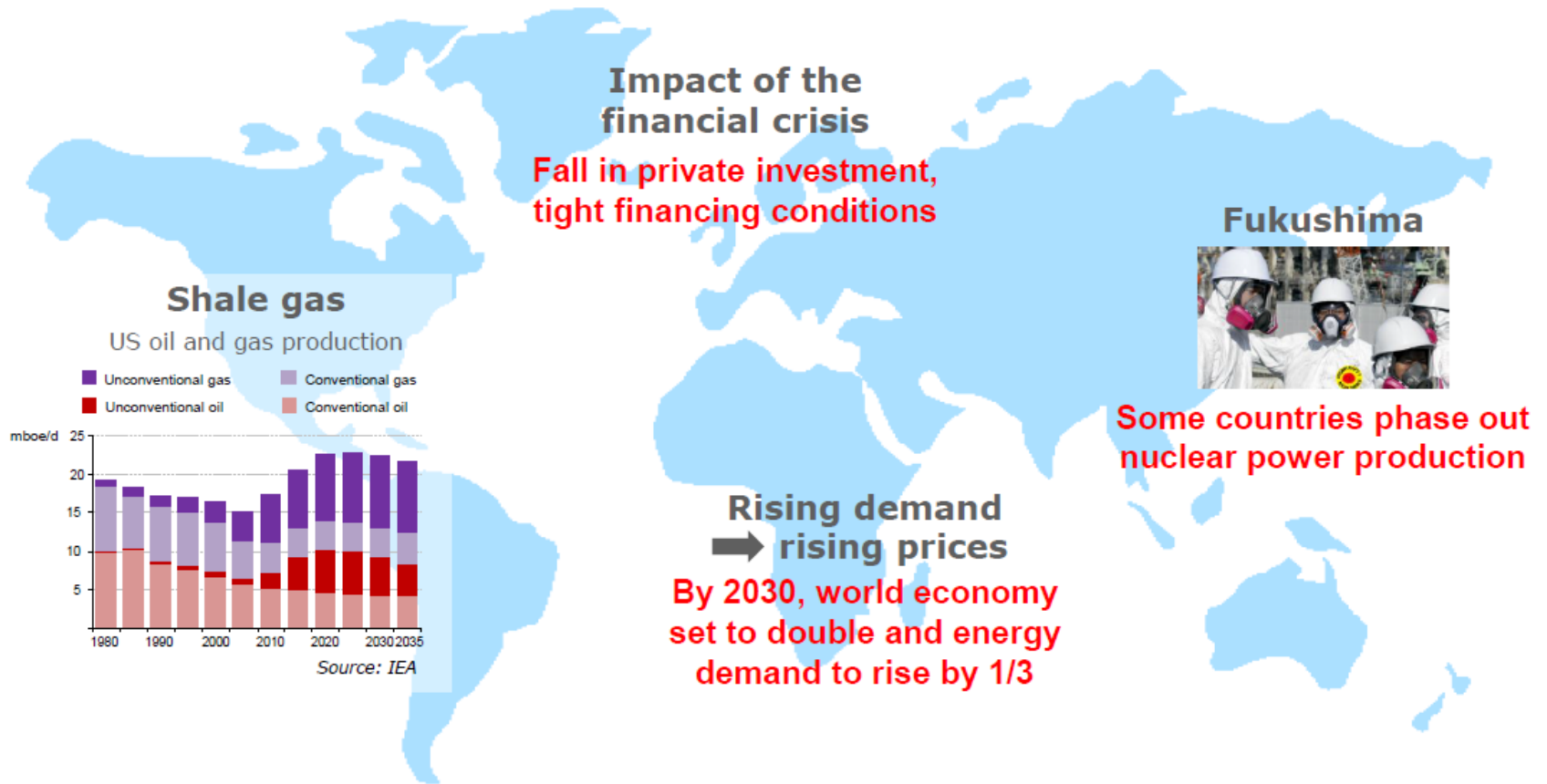


Renewable sources

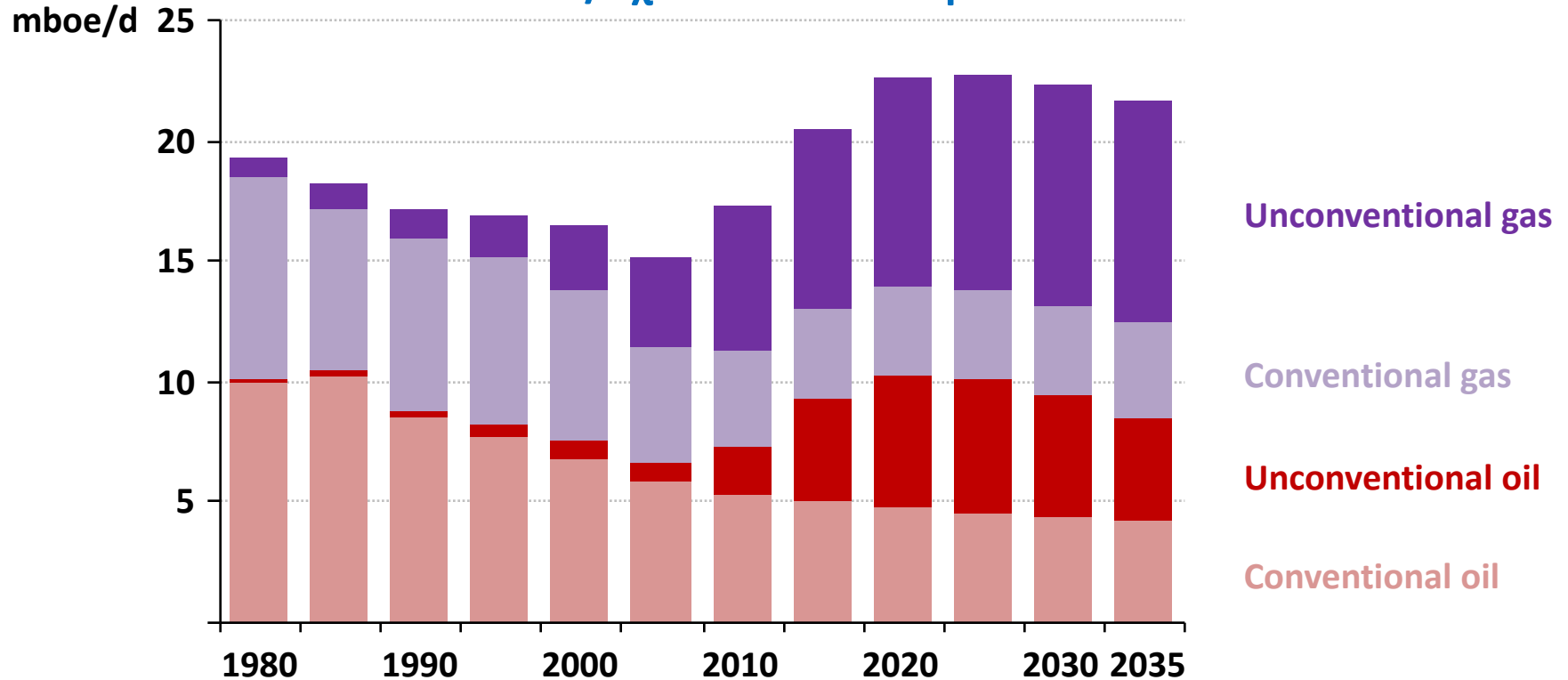
## Αειφορία

Sustainability

# Νεα δεδομένα στην παγκόσμια ενεργειακή αγορά



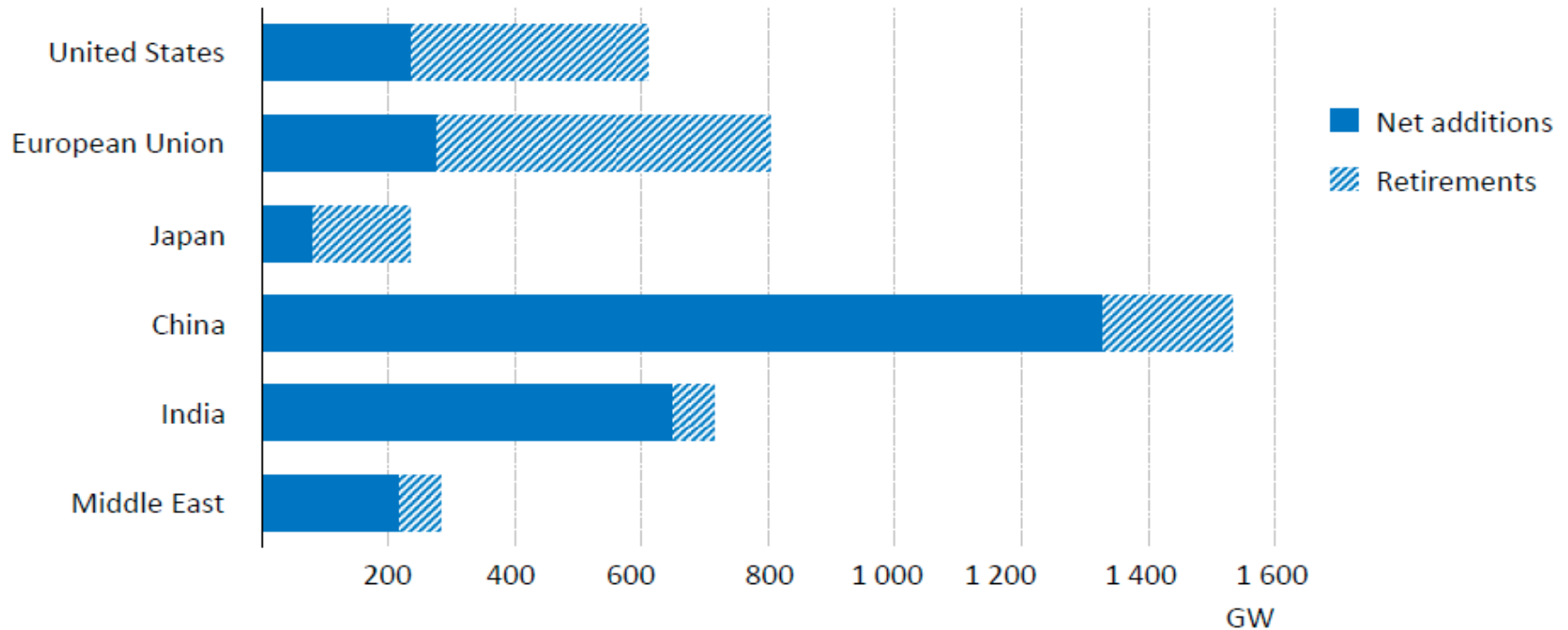
## ΗΠΑ παραγωγή πετρελαίου και φυσικού αερίου /σχιστολιθικού αερίου



*Η συγκεντρωση παραγωγής μη συμβατικών πηγών ενεργειας έχει επίδραση και έξω  
απο τις ΗΠΑ*

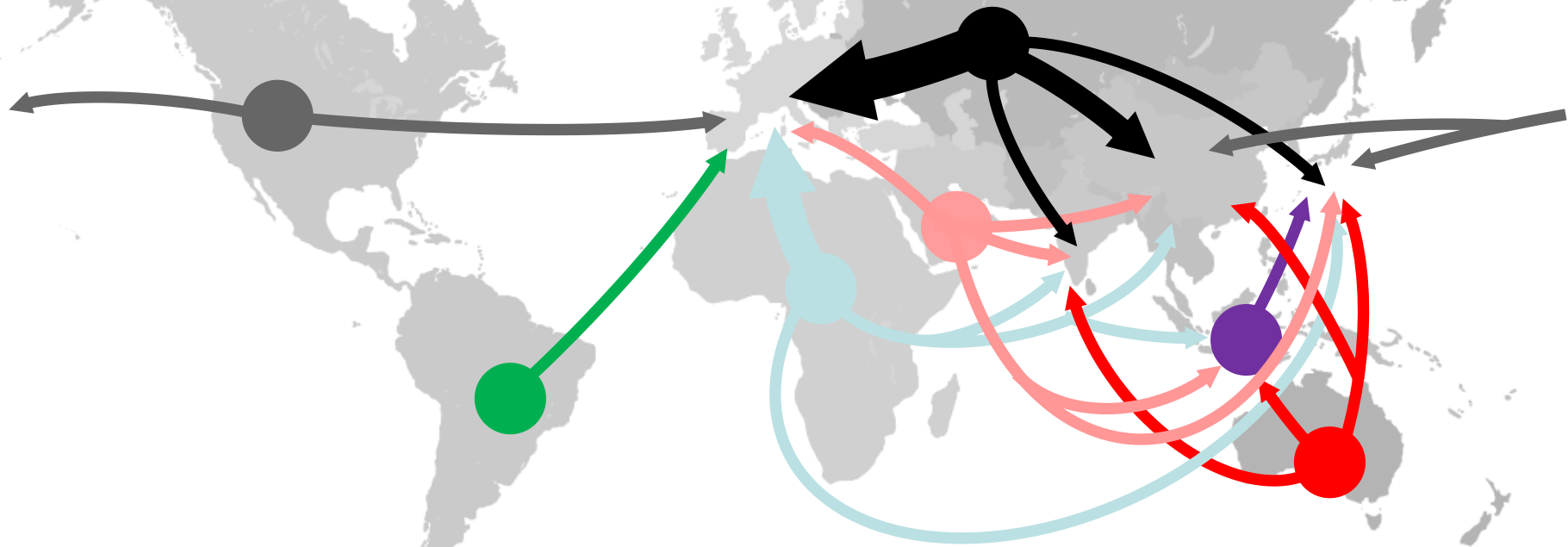
# Εγκαταστημένη ισχύς

## Power generation capacity additions and retirements, 2013-2035



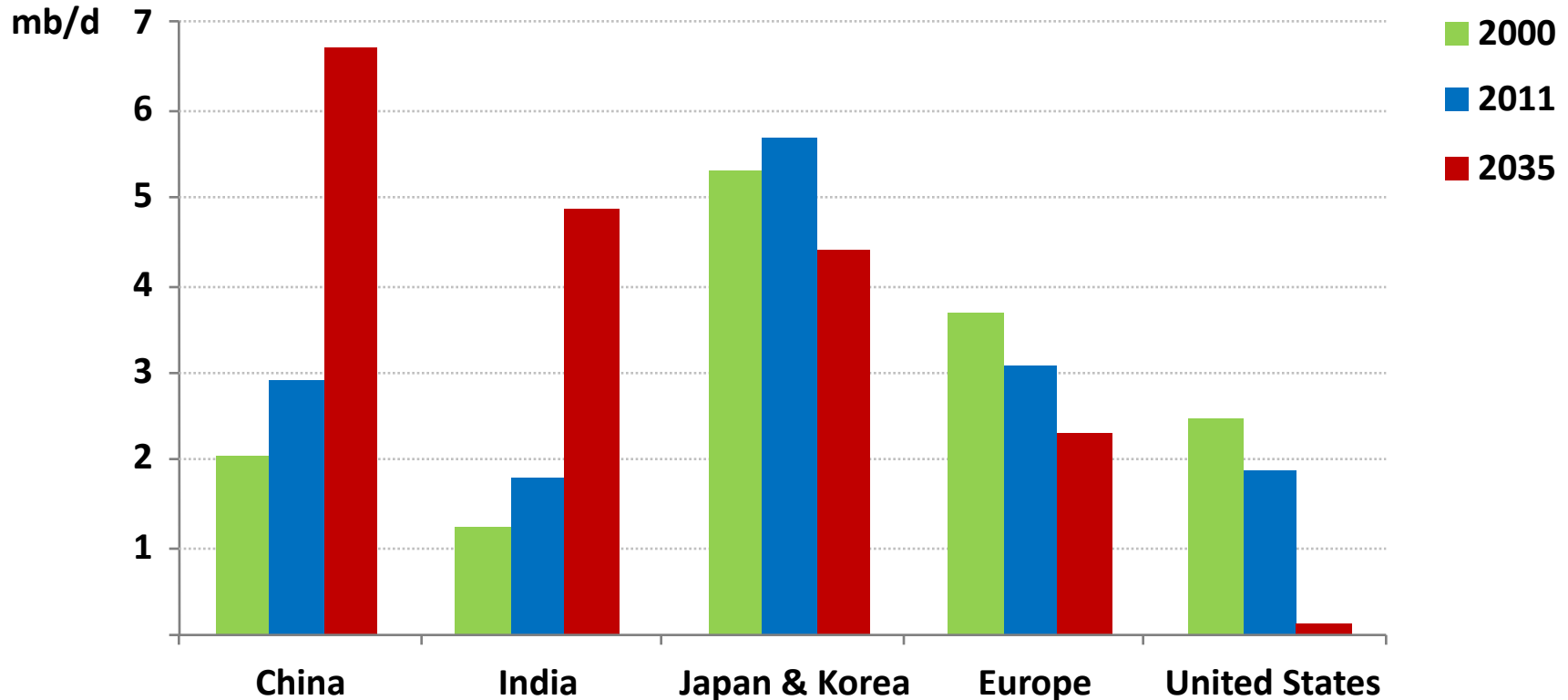
***China & India together build almost 40% of the world's new capacity;  
60% of capacity additions in the OECD replace retired plants***

## Διεθνής αγοράς φυσικού αερίου - Κύριες ροές , 2035



*Rising supplies of unconventional gas & LNG help to diversify trade flows, putting pressure on conventional gas suppliers & oil-linked pricing mechanisms*

## Εξαγωγές πετρελαίου μέσης ανατολής ανα προορισμο



***By 2035, almost 90% of Middle Eastern oil exports go to Asia; North America's emergence as a net exporter accelerates the eastward shift in trade***

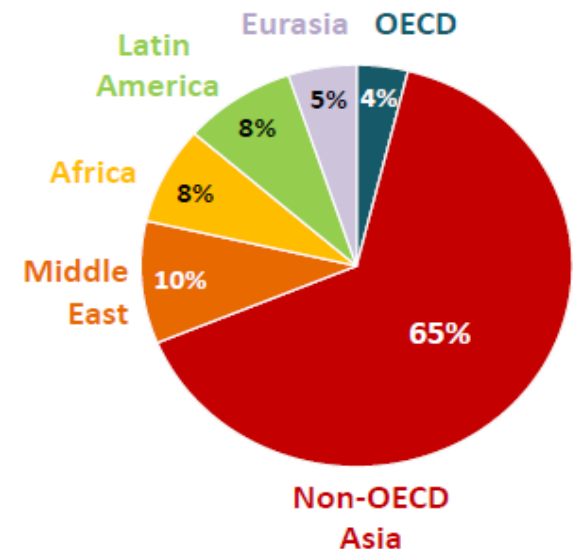
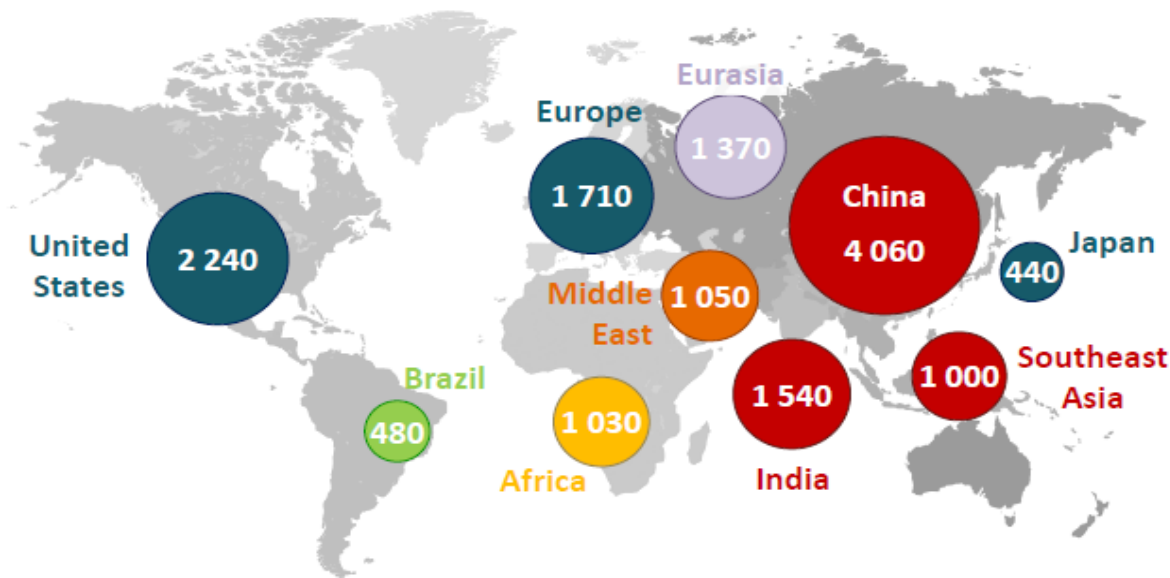


European  
Commission

# Αύξηση ενεργειακής ζήτησης στην νοτιοανατολική Ασία

Primary energy demand, 2035 (Mtoe)

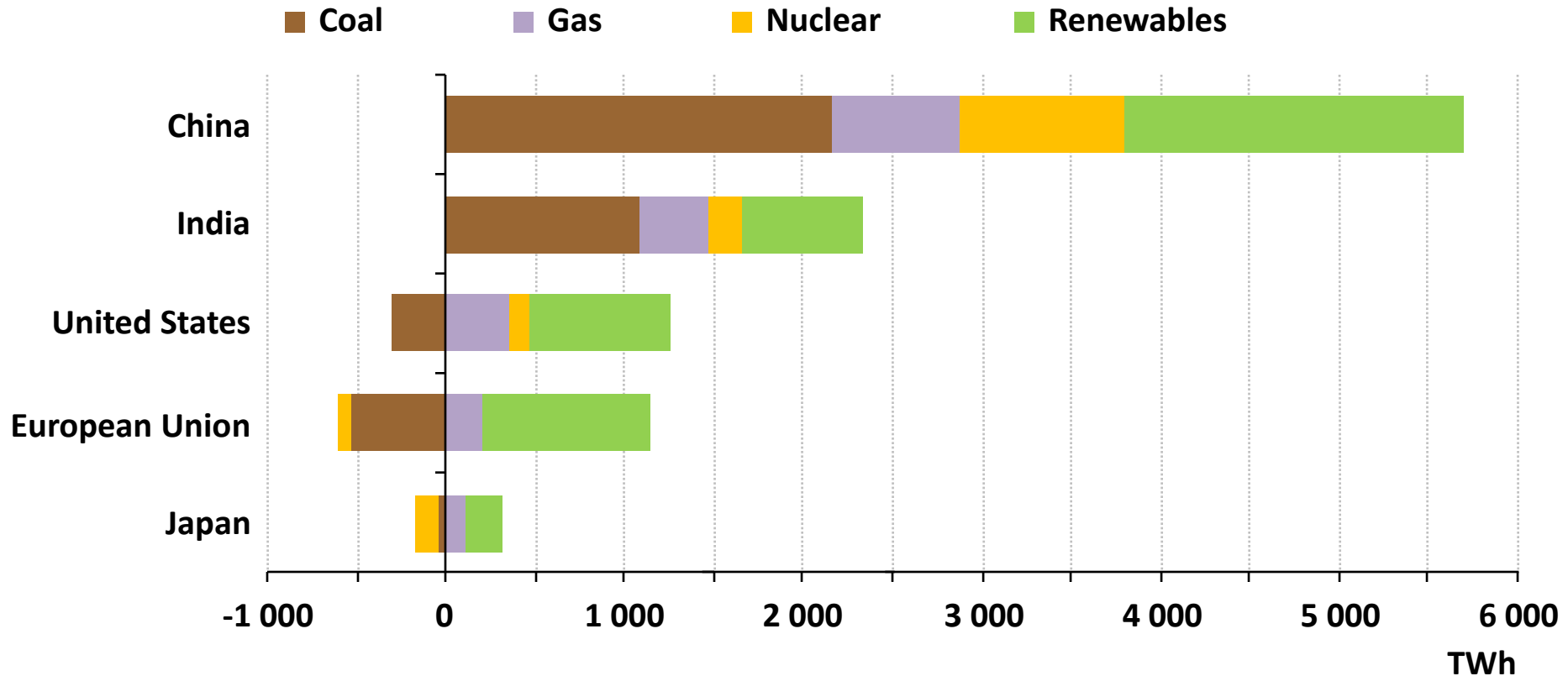
Share of global growth  
2012-2035



*China is the main driver of increasing energy demand in the current decade, but India takes over in the 2020s as the principal source of growth*



## Αλλαγές στον τρόπο παραγωγής ενέργειας, 2010-2035

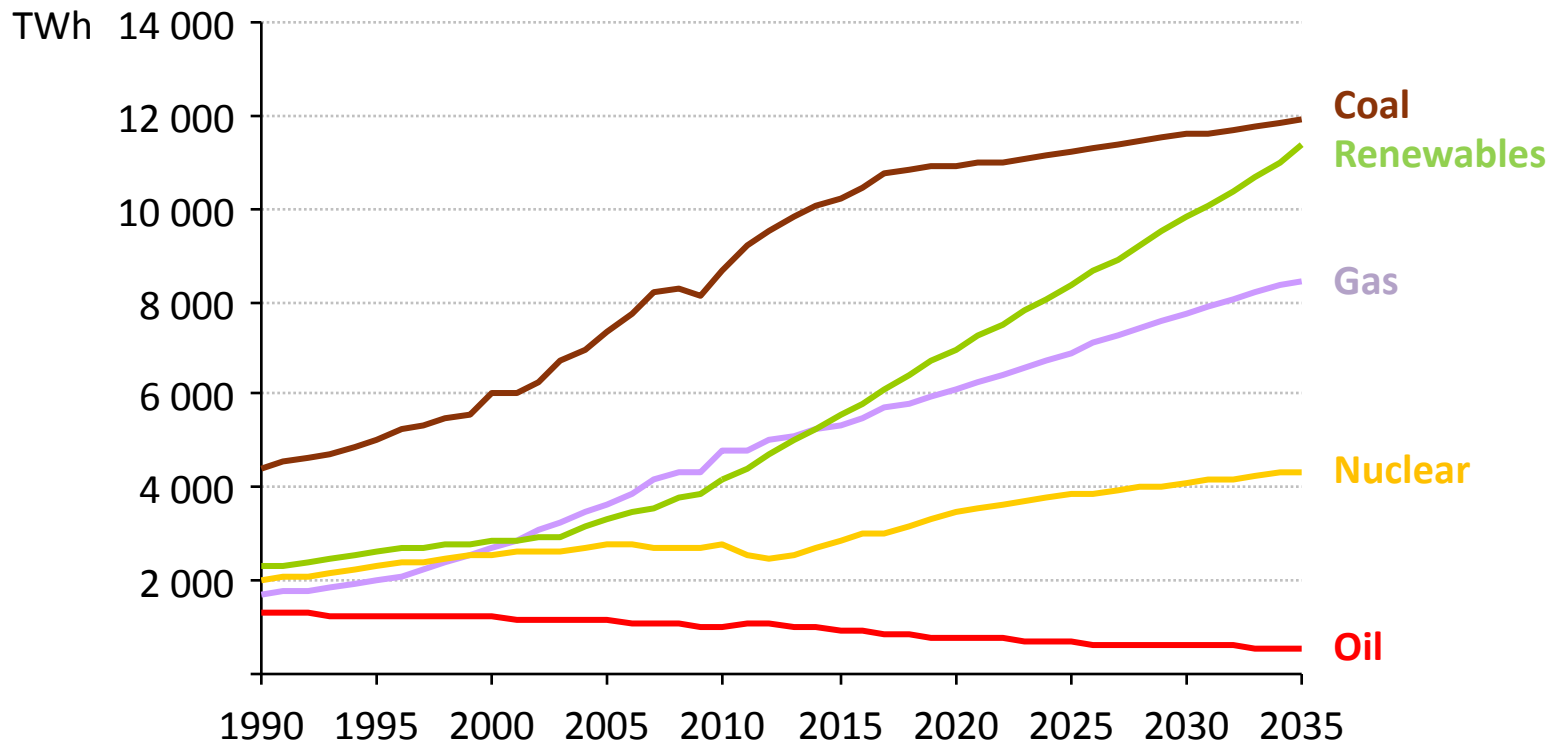


*The need for electricity in emerging economies drives a 70% increase in worldwide demand, with renewables accounting for half of new global capacity*



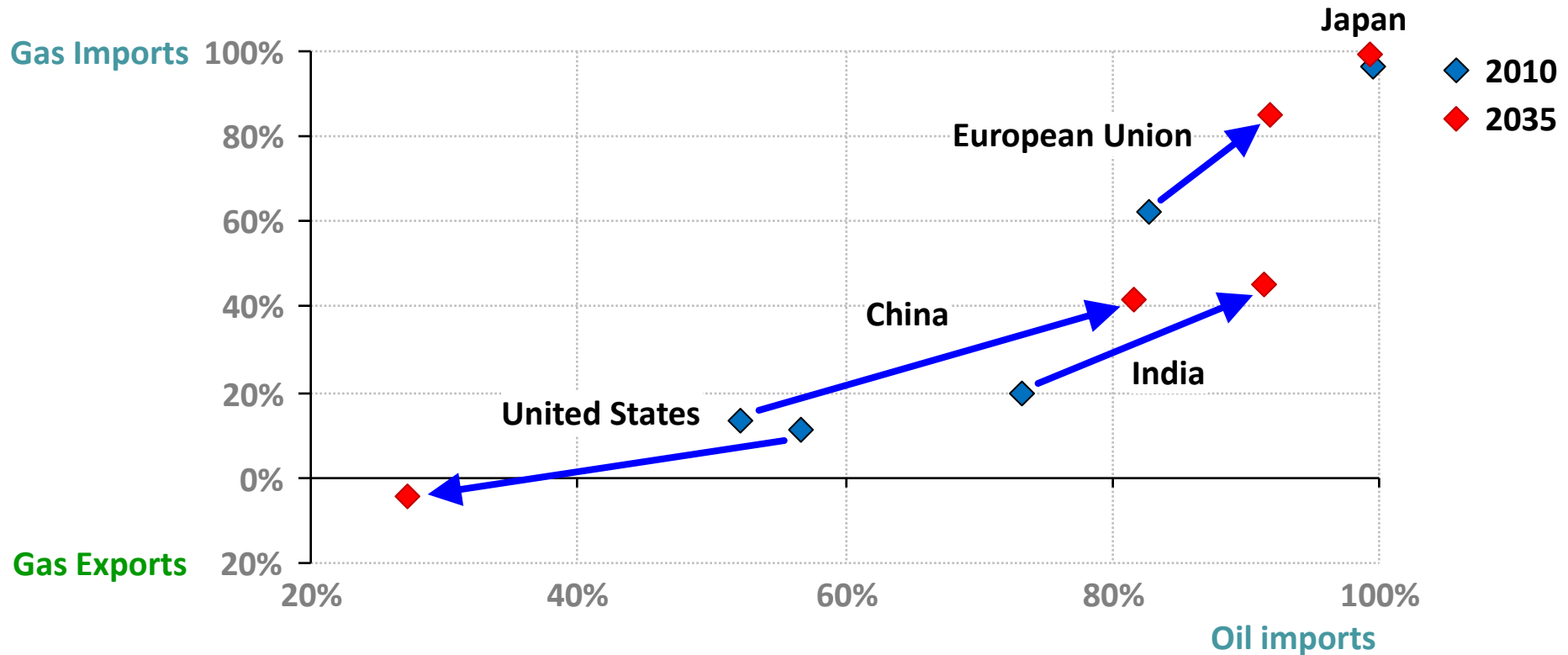
European  
Commission

# Το παγκόσμιο ενεργειακό μείγμα πρόκειται να αλλάξει



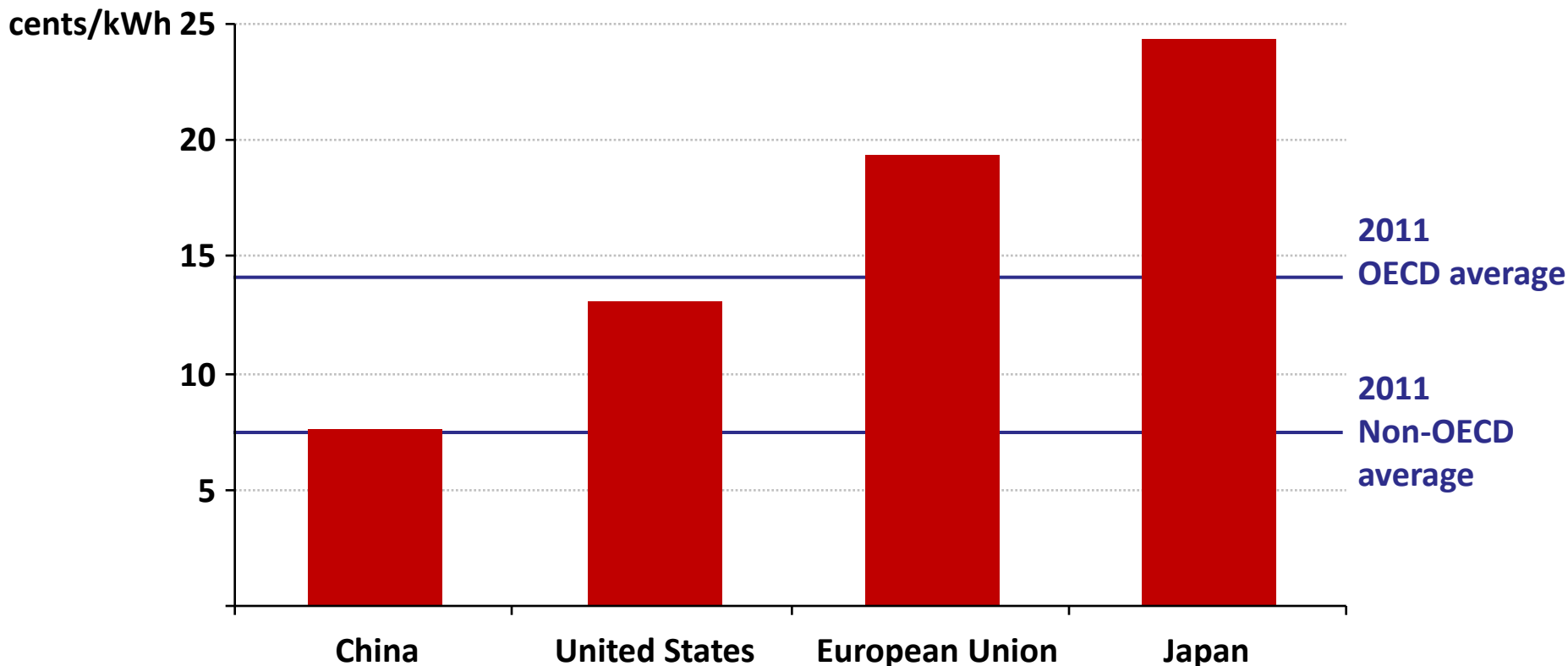
**Renewables electricity generation overtakes natural gas by 2015 & almost coal by 2035; growth in coal generation in emerging economies outweighs a fall in the OECD**

## Καθαρή εξάρτηση απο εισαγωγές πετρελαιου και φυσικού αερίου



***While dependence on imported oil & gas rises in many countries, the United States swims against the tide***

## Μέσες τιμές ηλεκτρικού ρευματος στα νοικοκυριά, 2035



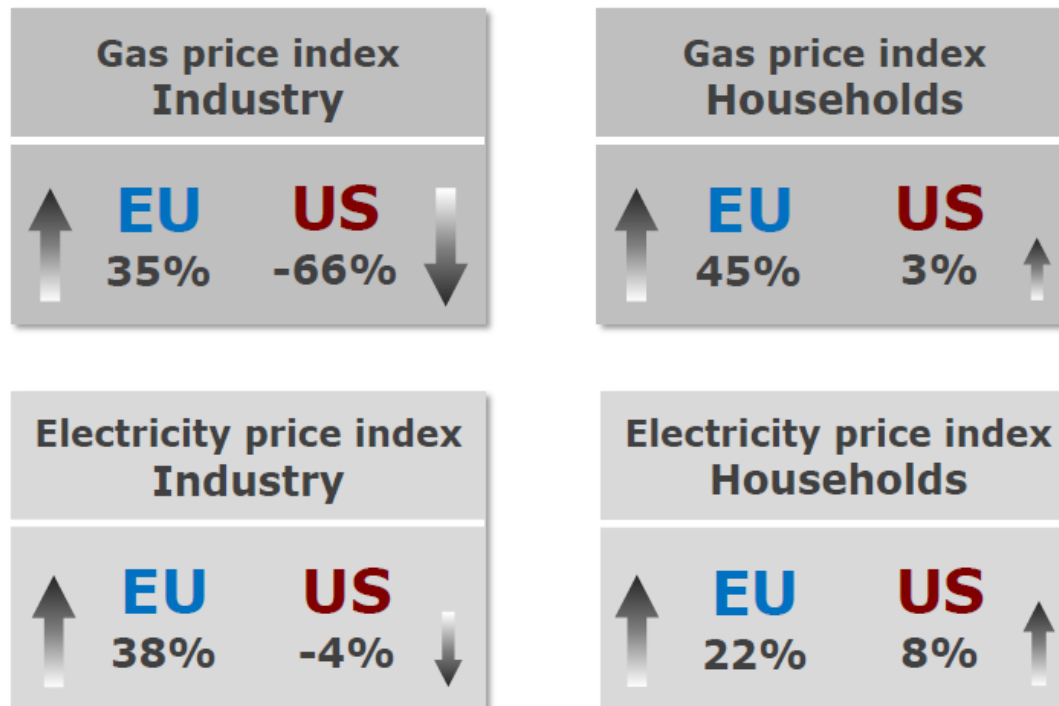
*Electricity prices are set to increase with the highest prices persisting in the European Union & Japan, well above those in China & the United States*



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# Οι τιμές ενέργειας επηρεάζουν τον ανταγωνισμό

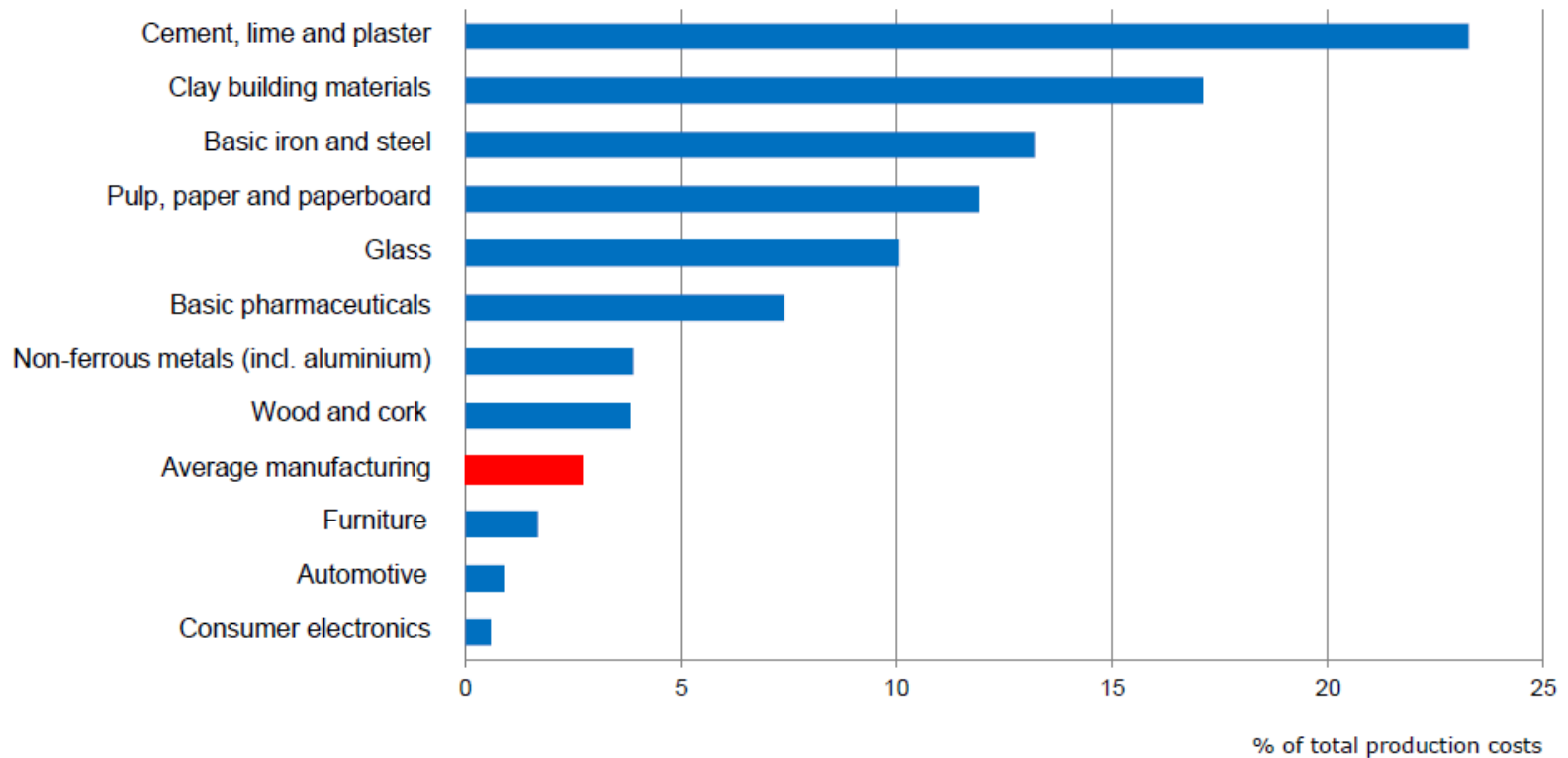
## Trends in energy price indexes 2005-2012



Source: IEA

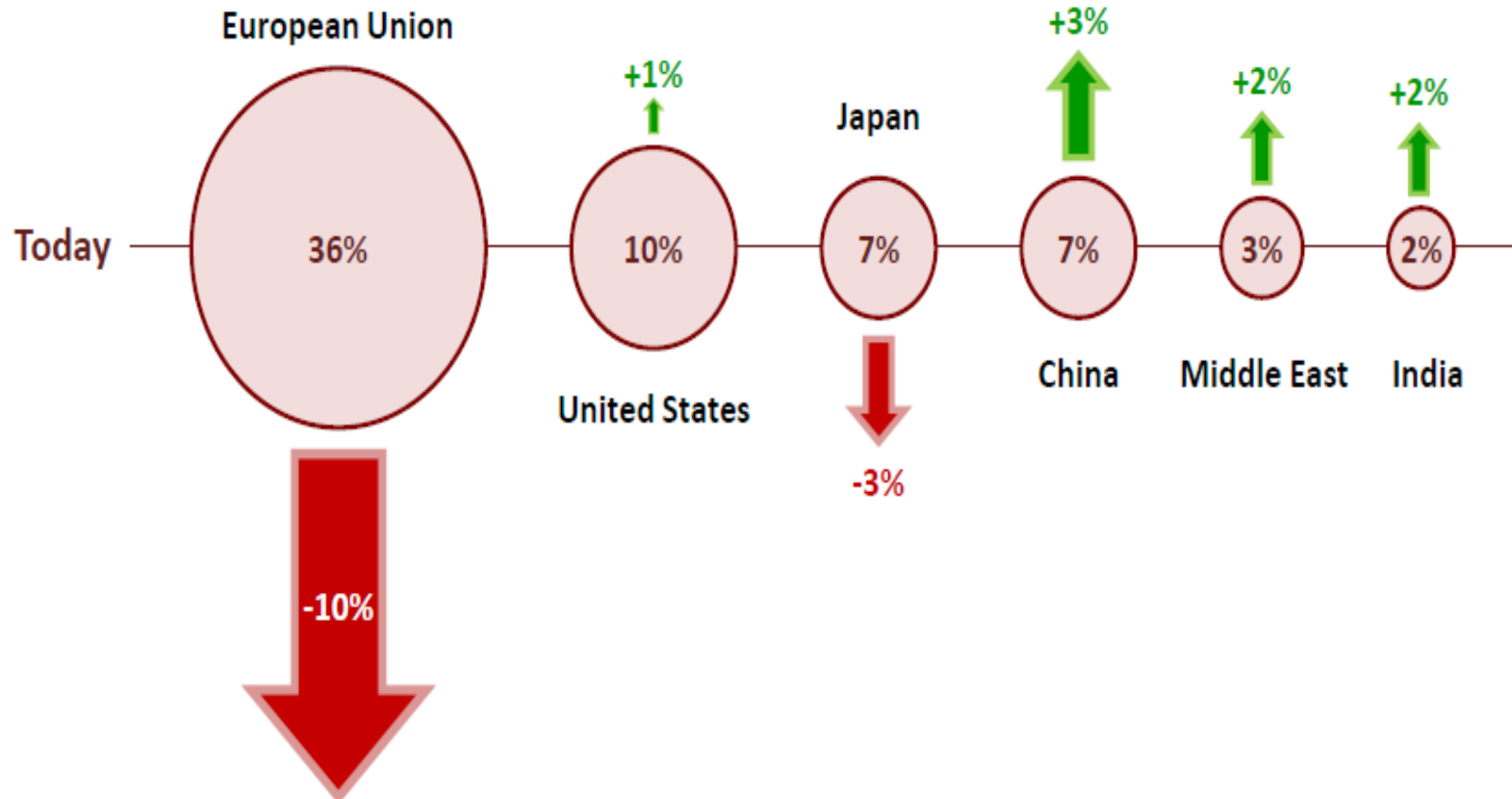
# Energy-intensive industries are most exposed

## Share of energy in % of production costs – selected sectors in Germany (2010)

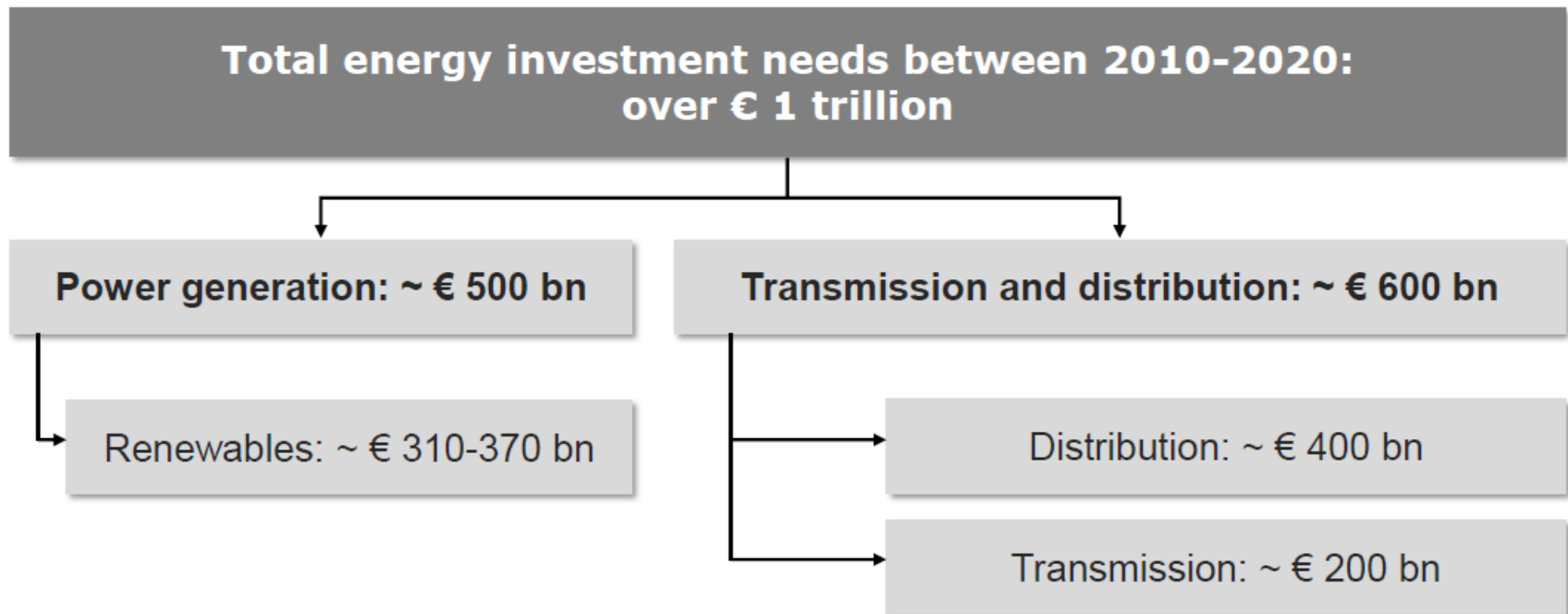


Source: European Commission

# Μερίδιο αγοράς εργοβόρων προϊόντων



# Υπέρογκες επενδύσεις για παραγωγή και διανομή



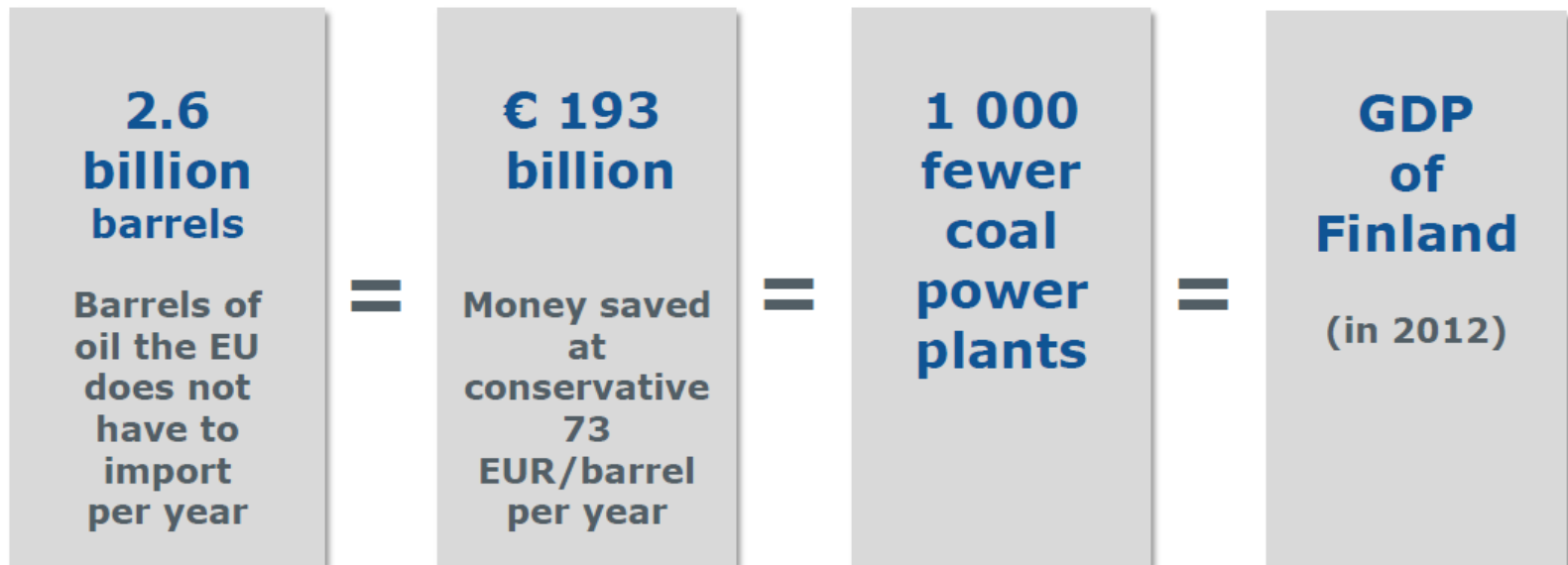
Source: European Commission



# Προτεραιότητα 1

## Ανοδος της ενεργειακής αποδοτικότητας

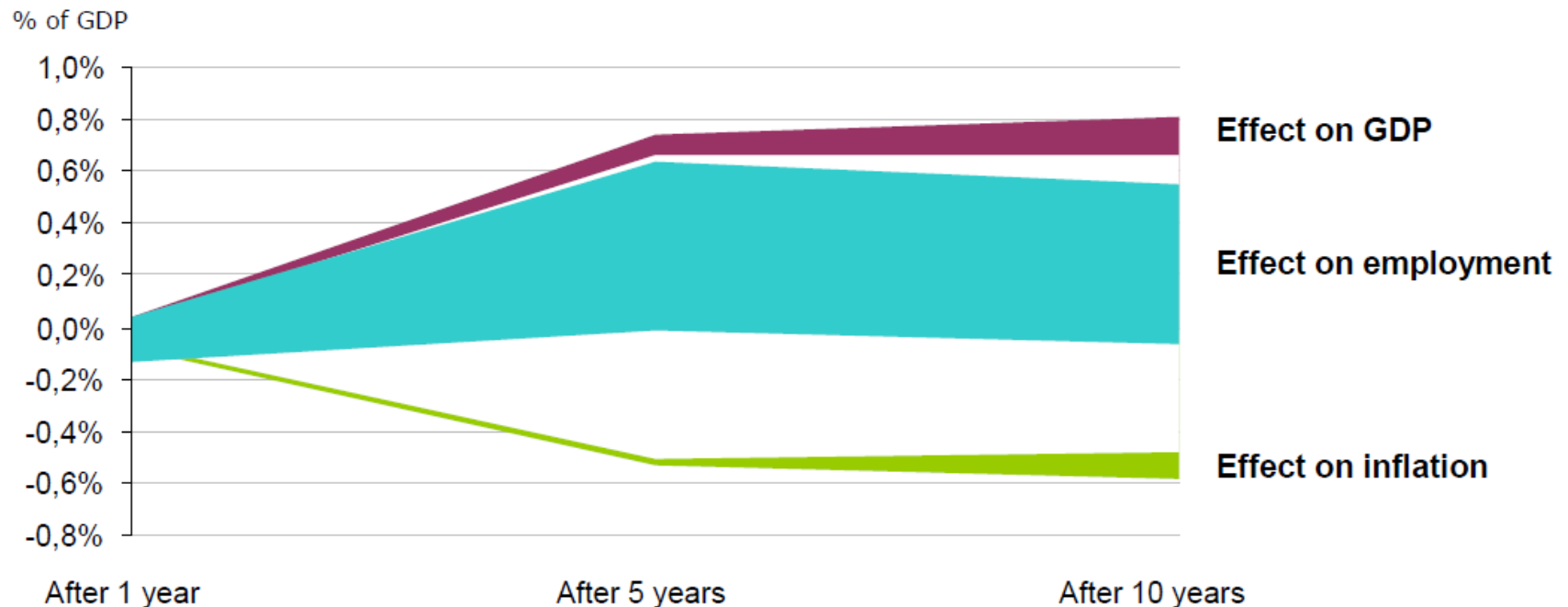
### Benefits of EU energy savings target of 20% by 2020



# Προτεραιότητα 2

## Ολοκλήρωση της εσωτερικής αγοράς ενέργειας

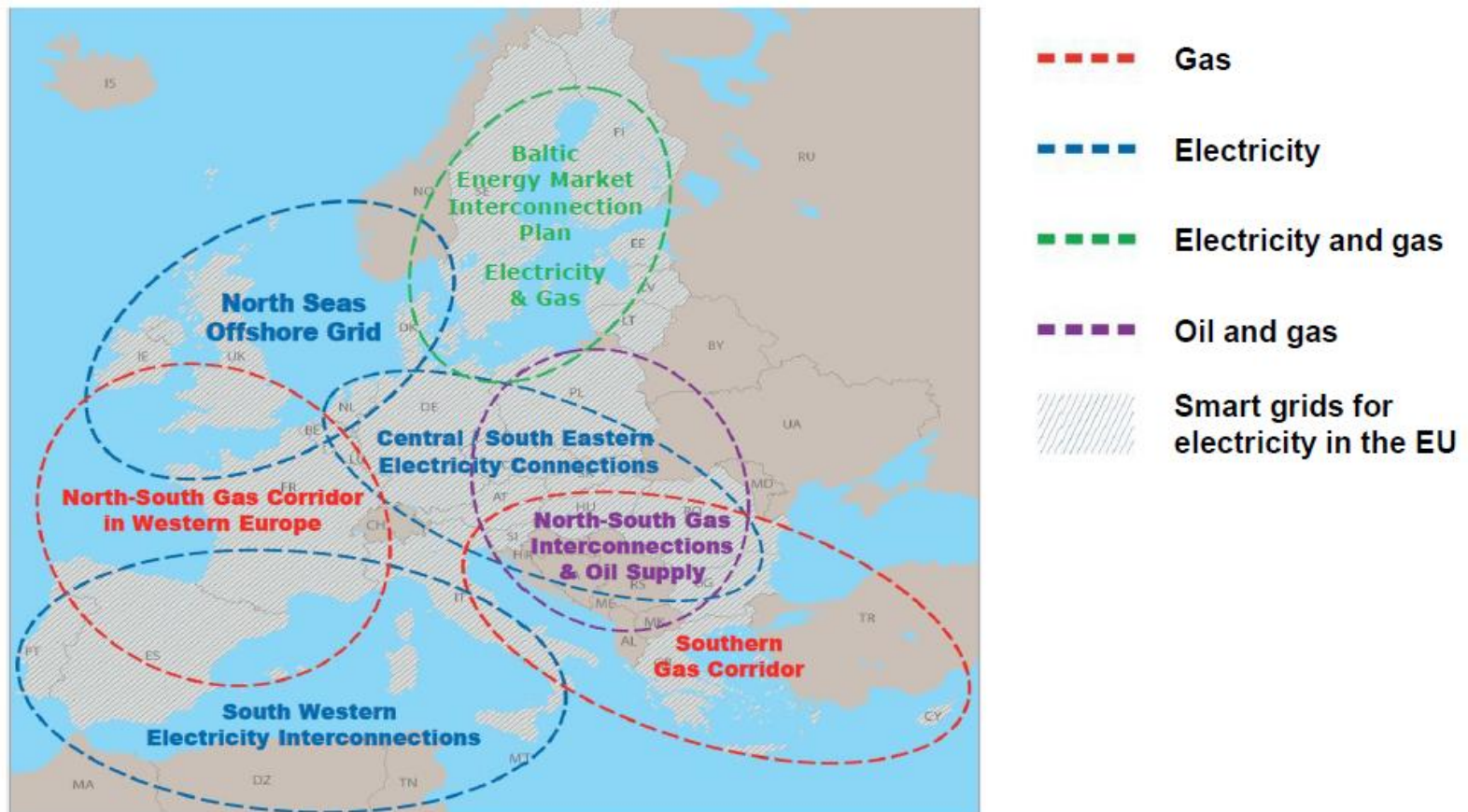
### Estimated effects of opening gas & electricity markets (in % of GDP - ranges)





European  
Commission

## Προτεραιότητα 3. Ευφυείς υποδομές



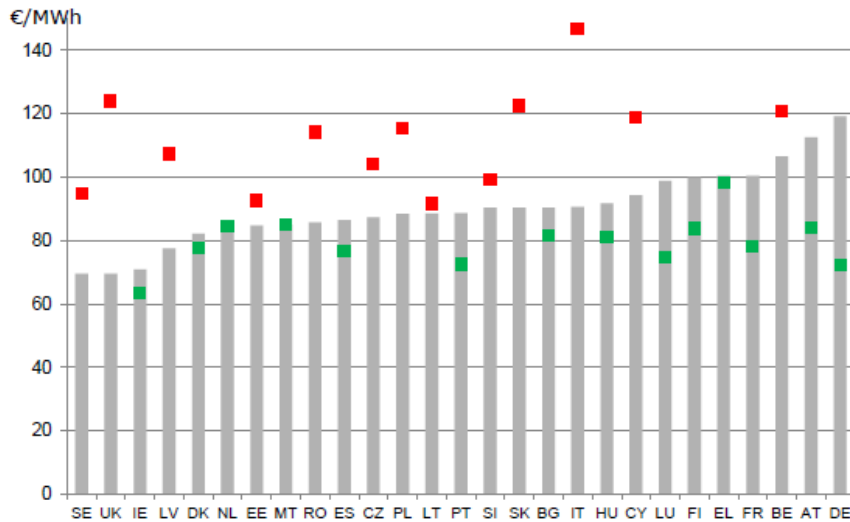
Source: European Commission

# Προτεραιότητα 4. Οικονομικά αποδοτική χρήση ΑΠΕ

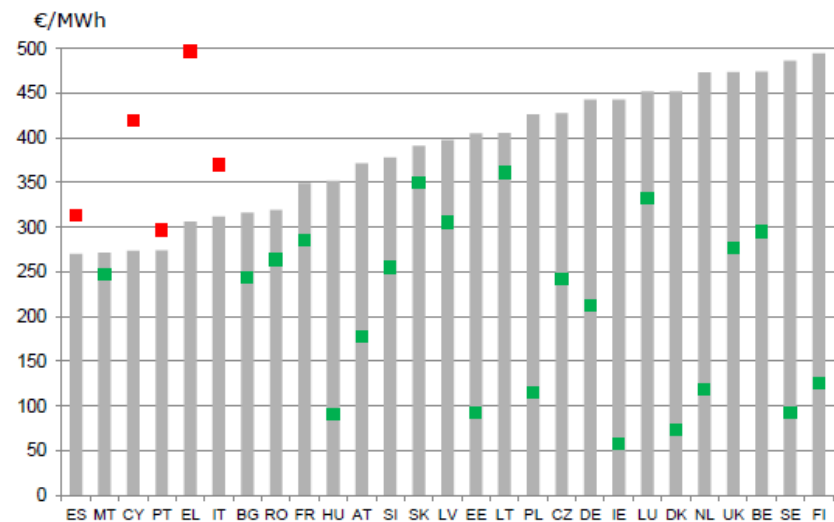
## Production costs versus subsidies for renewables (averages, in €/MWh, latest year available)

■ Production costs      ■ Subsidies over production costs      ■ Subsidies below production costs

### Wind energy on-shore



### Solar energy (photovoltaics)





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# Προτεραιότητα 5. diversified energy supply και χρήση νηενών πηλών



This map is for communication purposes only.  
The information contained in this map does not necessarily reflect the policy of the European Union.



# Χρηματοδότηση της ενεργειακής πολιτικής

## Τι θέλουμε να επιτύχουμε?

The importance of energy policy is well reflected in the multi-year EU budget for 2014-2020.

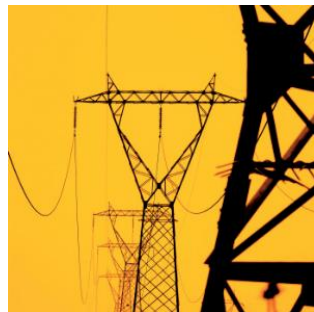
**Προτεραιότητες για χρηματοδότηση έργων στους τομείς:**

- Υποδομές / **infrastructure,**
- Τεχνολογίες / **technology,**
- Ενεργειακή αποδοτικότητα και ΑΠΕ
- Βελτίωση πυρηνικής ασφάλειας και παροπλισμού.



# SET-Plan

...in motion

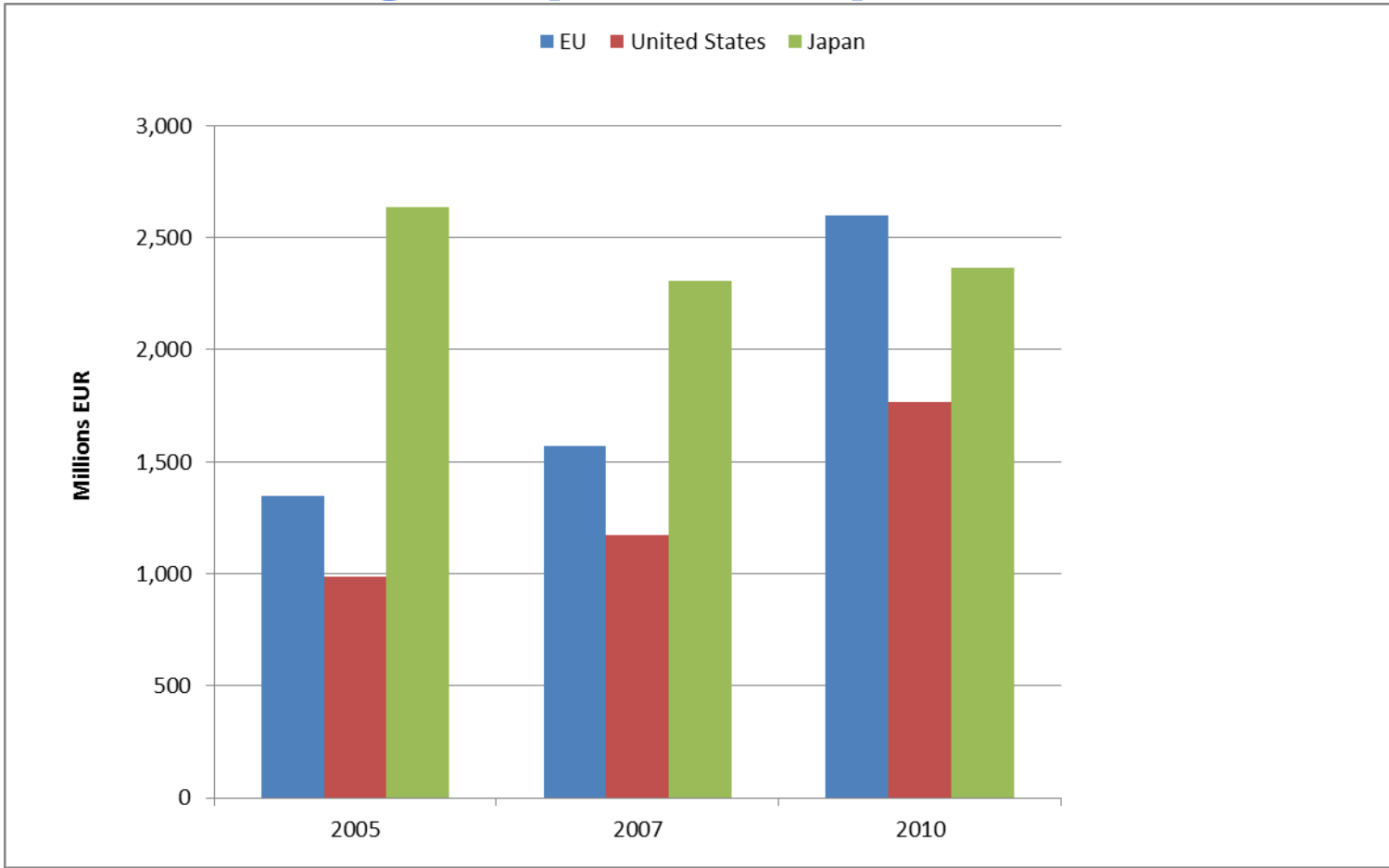


**SETIS**  
Information For Decision-making

# EU public R&D spending for energy



***Increased over 2007- 2010  
and caught up with Japan and USA***



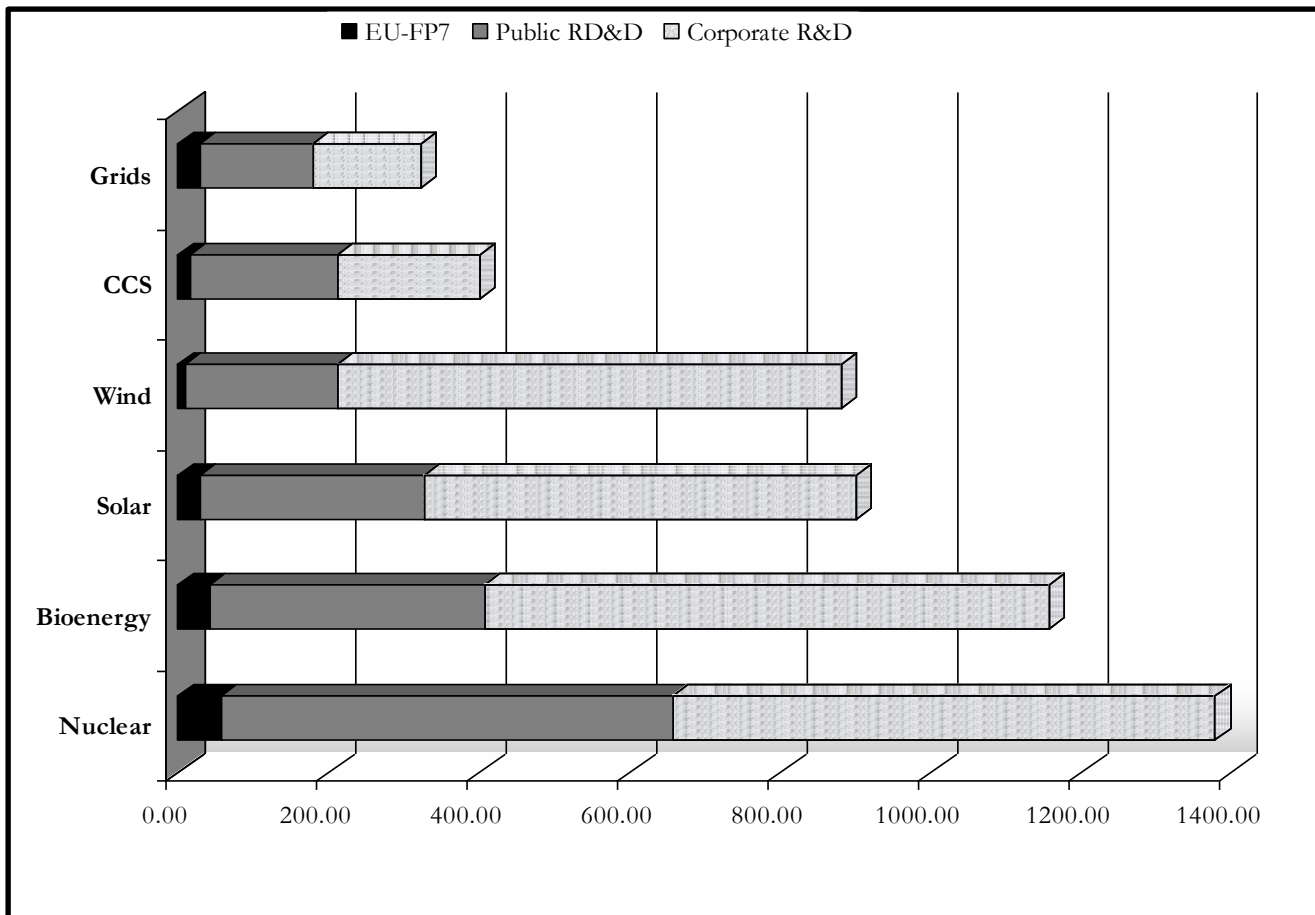
Source: JRC/SETIS



# SET Plan R&D investments in 2010

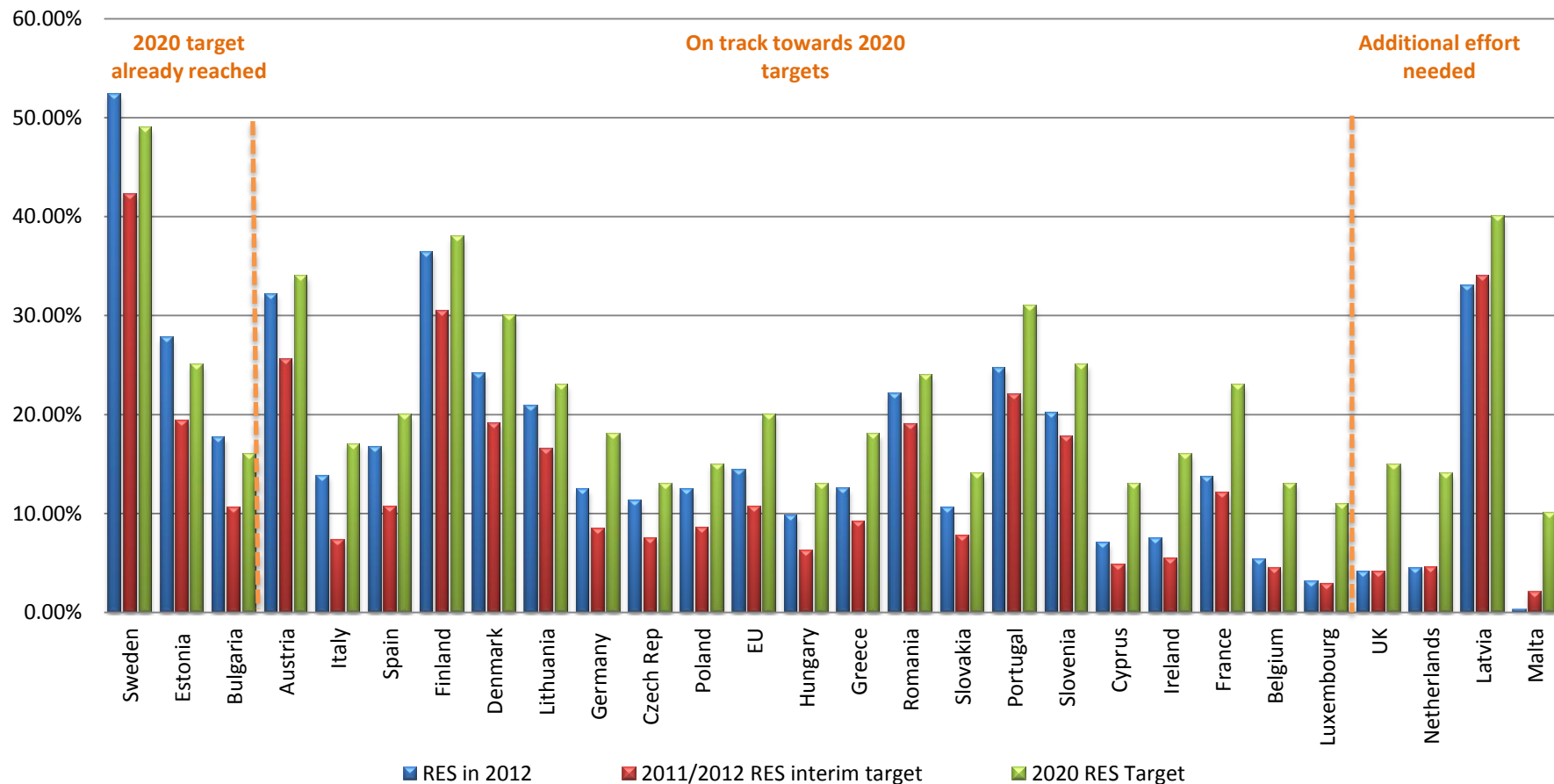


*Almost a doubling compared to 2007*



Public and corporate R&D by SET Plan technologies and source (2010) - EPR funding is not included - Source: JRC/SETIS (COM(2013) 253 final)

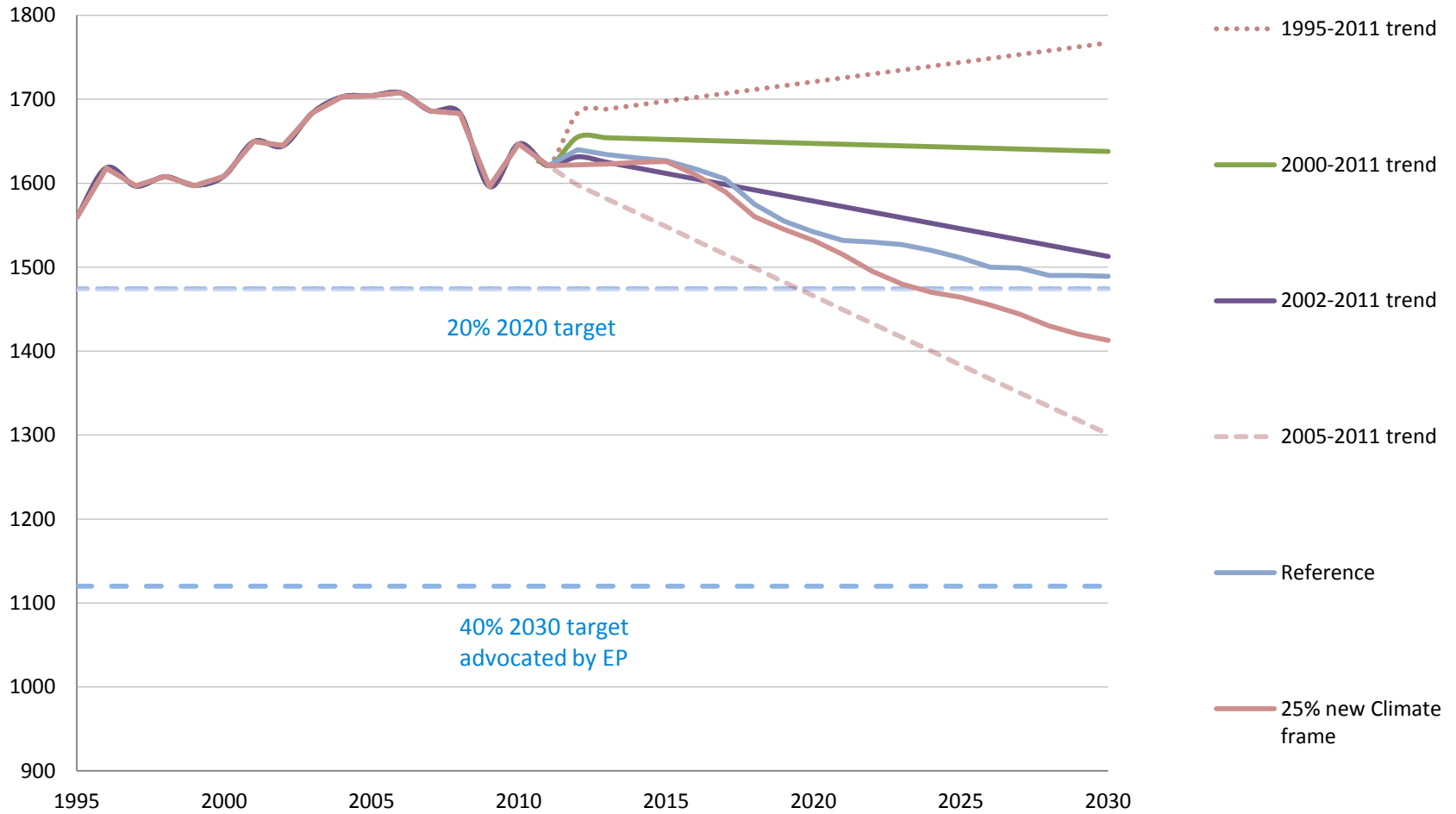
## RES share of the final energy consumption (2012)



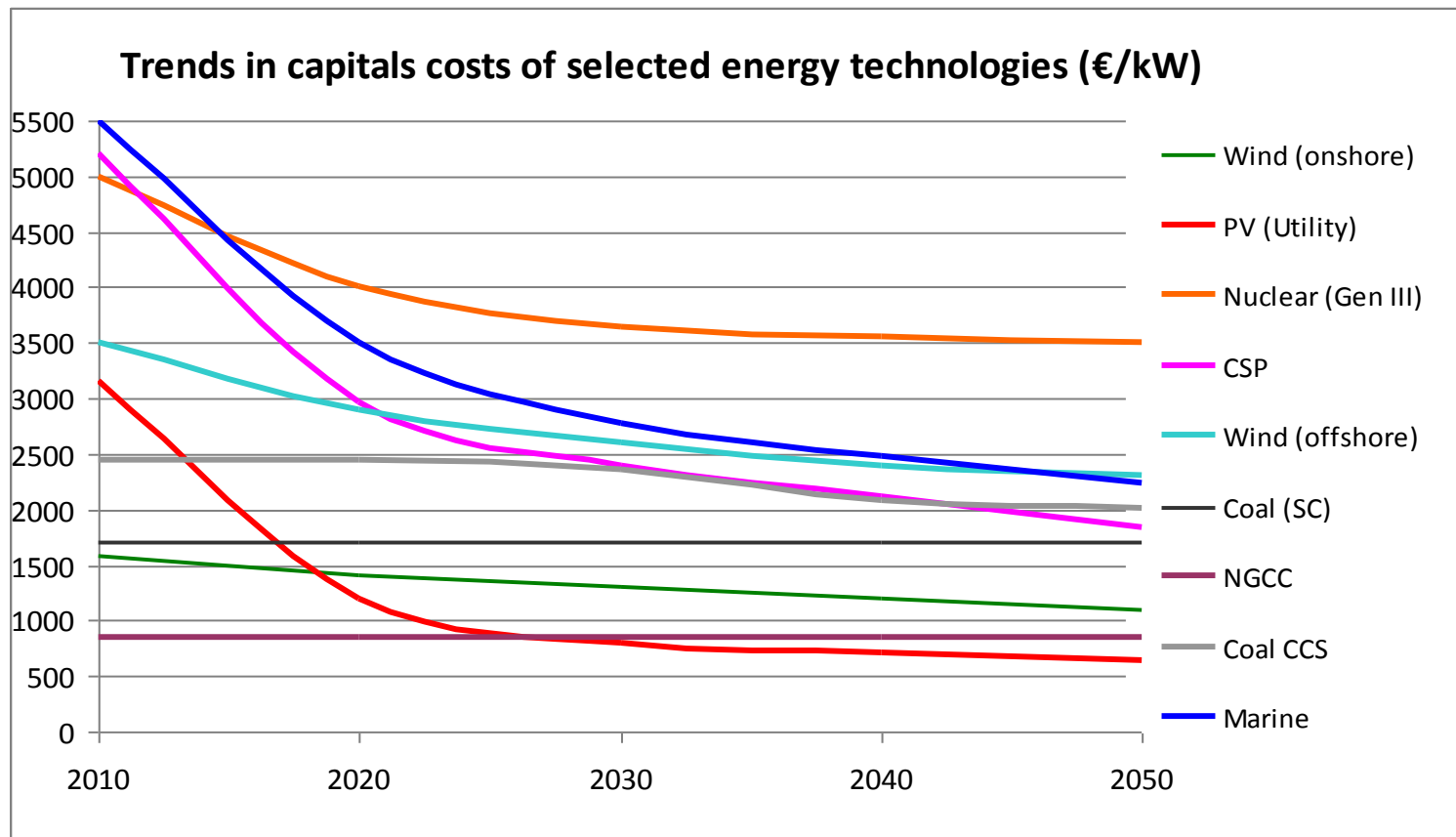


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Primary energy (GIC-NEU) [Mtoe]

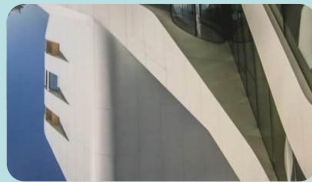


## *Remains a significant potential for innovation to be captured*



*Capital cost reductions for selected energy technologies in absolute values - Source: JRC-SETIS SWD(2013)158 final*

# The key barriers are both technological and non-technological



## Technological

- **Materials and components -design and design tools**
- **Deep renovation**
- **Industry (process industry and fabrication)**



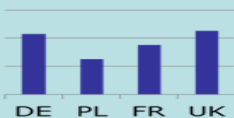
## Administrative

- Building capacity and skills
- Exchange of best practice



## Financial

- Creating favourable market conditions
- Replicating successful business models
- Preparing the ground for investments



## Regulatory

- Shaping policy development and implementation
- Tackling regulatory barriers
- Informing stakeholders and fostering commitment

# Horizon 2020

**R&D -  
Εταιρικές  
σχέσεις  
Δημόσιου  
Ιδιωτικού  
τομέα (PPP)**

**Δράσεις  
προώθησης  
στην αγορά**

***FP 7***

***First  
application***

***Intelligent Energy  
Europe***

# ENERGY CHALLENGE (2014-2015)

## Low Carbon Energy



## Smart Cities & Communiti es



## Energy Efficiency



## SMEs and Fast Track to Innovatio n

# What is Horizon 2020?

## The new European Union programme for research and innovation for 2014-2020

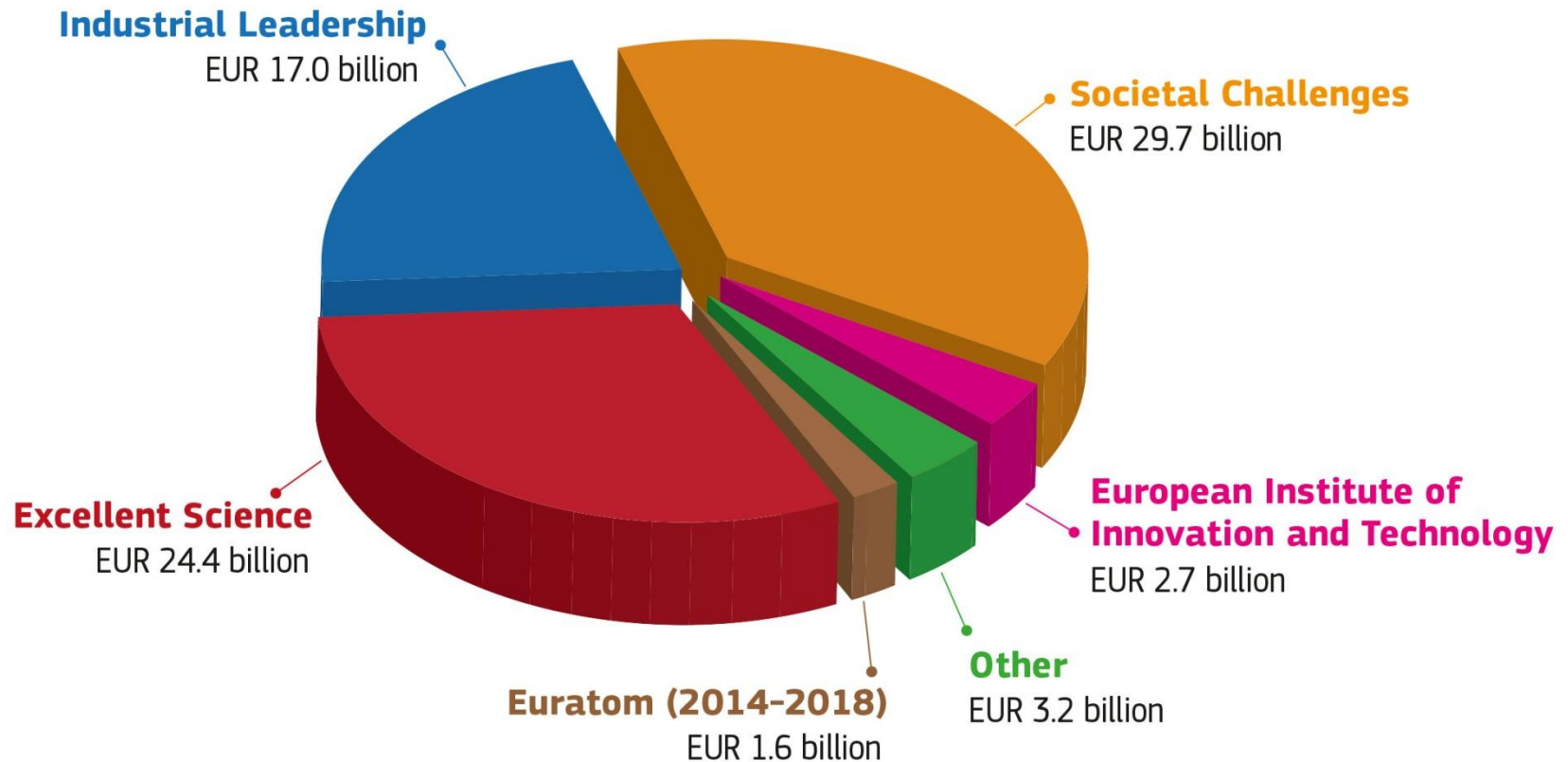
- **An integrated programme coupling research to innovation** /bringing together three separate programmes/initiatives
- **Challenge based**
- **Strong focus on SMEs** (20% of total budget for societal challenges )
- **Major simplification** for all companies, universities, institutes in all EU countries and beyond



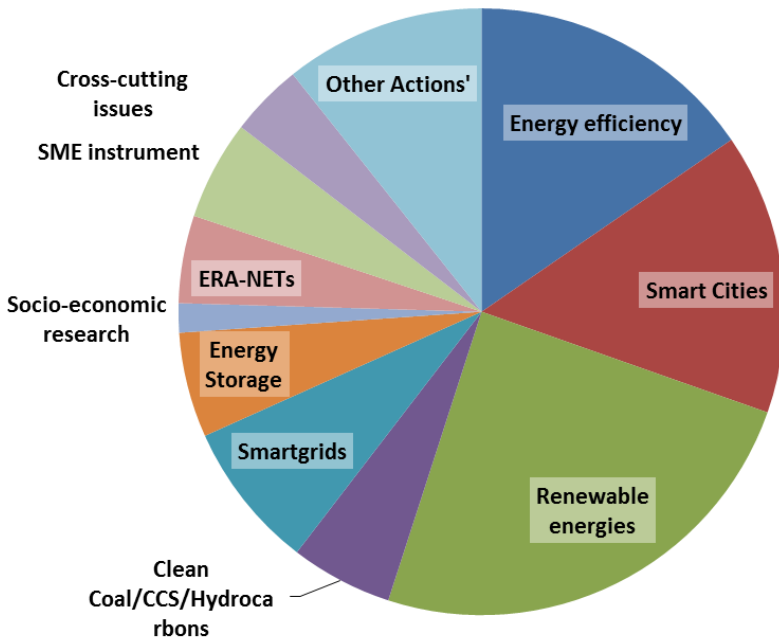


# € 79 billion from 2014 to 2020

## HORIZON 2020 BUDGET (in current prices)



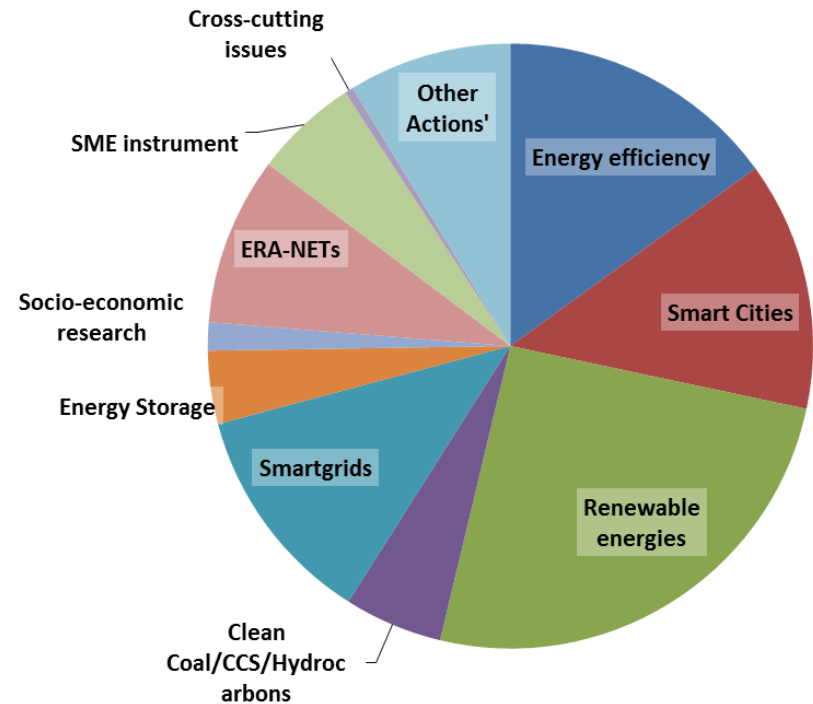
## Budget allocation of the Energy WP (2014)



TOTAL budget for 2014: **EUR 607 million**

+ Contribution to JTI Fuel Cells and Hydrogen in 2014: **EUR 60 million**

## Budget allocation of the Energy WP (2015)



TOTAL budget for 2015: **EUR 647 million**

+ Contribution to JTI Fuel Cells and Hydrogen in 2015: **EUR 70.5 million**

# Three priorities



# **Priority 1. Excellent science**

## **Why:**

- **World class scientific research is the foundation of tomorrow's technologies, jobs and wellbeing**
- **Europe needs to develop, attract and retain research talent**
- **Researchers need access to the best infrastructures**

## **Priority 2. Industrial leadership**

### **Why:**

- **Strategic investments in key technologies (e.g. nanotechnologies, advanced manufacturing, micro-electronics) underpin innovation across existing and emerging sectors**
- **Europe needs to attract more private investment in research and innovation**
- **Europe needs more innovative small and medium-sized enterprises (SMEs) to create growth and jobs**

# Priority 3.

## Societal challenges

### Why:

- **Concerns of citizens and society/EU policy objectives (climate, environment, energy, transport, etc) cannot be achieved without innovation**
- **Breakthrough solutions come from multi-disciplinary collaborations, including social sciences**
- **Promising solutions need to be tested, demonstrated and scaled up**

## Proposed funding (€ million, 2014-2020)

<b>Health, demographic change and wellbeing</b>	<b>7 472</b>
<b>Food security, sustainable agriculture and forestry, marine and maritime and inland water research and the Bioeconomy</b>	<b>3 851</b>
<b>Secure, clean and efficient energy *</b>	<b>5 931</b>
<b>Smart, green and integrated transport</b>	<b>6 339</b>
<b>Climate action, environment, resource efficiency and raw materials</b>	<b>3 081</b>
<b>Inclusive, innovative and reflective societies</b>	<b>1 310</b>
<b>Secure societies</b>	<b>1 695</b>
<i>Science with and for society</i>	462
<i>Spreading excellence and widening participation</i>	816

\* Additional funding for nuclear safety and security from the Euratom Treaty activities (2014-2018)

# New approach to work programmes and calls

- **More strategic**
- **Two year work programmes**  
(2014-2015: > € 15 billion)
- **Less prescriptive calls**  
(64 calls in 2014)
  - ✓ Broader and fewer topics
  - ✓ First call deadlines as from March 2014





# International cooperation

## **Principle of general openness**

the programme will remain the most open funding programme in the world but EU interests will be protected better.

## **Open to the associated countries**

Targeted actions to be implemented taking **a strategic approach to international cooperation**



# Partnerships with industry and Member States

- **Additional contractual Public-Private Partnerships e.g**
  - Energy-efficient Buildings
  - Green Vehicles
  - Sustainable Process Industries (SPIRE)

## In addition:

- **Joint programmes**  
(with Member States, under Article 185)
- ERANET
- **Joint Technology Initiatives**  
(with industry under Article 187)



# Major Simplification for the benefit of applicants

## 1. A single set of rules for all funding under Horizon 2020

- ✓ Fewer, more flexible, funding instruments

## 2. Simpler reimbursement: 1 project = 1 funding rate

- ✓ 100% of the total eligible costs (70% for innovation actions)
- ✓ Non-profit legal entities can also receive 100% in innovation actions
- ✓ Single flat rate for indirect costs (25% of eligible costs)

## 3. Faster time to grant

- ✓ Within 8 months of call deadline



# Major Simplification for the benefit of applicants

4. Fewer, better targeted controls and audits
5. Coherent implementation
  - ✓ Through dedicated agencies
  - ✓ Single IT system
6. Simplification in grant agreements



# Evaluation criteria



- ✓ **ERC** frontier Research actions >> only EXCELLENCE
- ✓ **Innovation actions** >> higher weighting for "IMPACT"

**Proposal evaluated by the experts "as it is"  
and not as "what could be" = no need for negotiation**

# Simpler access through the Participant Portal

- **Single entry point** from calls to electronic submission of proposals
- **New tools for smart searches for the benefit of users,** including newcomers to the programme.

The screenshot shows the homepage of the European Commission's Research & Innovation Participant Portal. The header includes the European Commission logo and navigation links. The main content area features a prominent banner for "Horizon 2020 Funding" starting from 1/1/2014. Below the banner, there is a section for "On this site you can find and secure funding for research & innovation projects under the following EU programmes:" listing the 2014-2020 Horizon 2020 and the 2007-2013 7th research framework programme (FP7) and Competitiveness & Innovation Programme (CIP). There are also sections for "Non-registered users" and "Registered users" with their respective capabilities. At the bottom, there is a navigation bar with icons for "WHAT'S NEW?", "FUNDING OPPORTUNITIES", "HOW TO PARTICIPATE", "WORK AS AN EXPERT", "MY PERSONAL AREA", and "INFORMATION AND SUPPORT".

The screenshot shows the "Funding Opportunities" page of the European Commission's Research & Innovation Participant Portal. The header is consistent with the homepage. The main content area features a search bar for "Horizon 2020" calls, topics, and updates. A prominent message states: "Please note that the H2020 calls have not yet been published and thus this section is not available". Below this, there is a "Funding Opportunities" section with a "H2020 ONLINE MANUAL" link. The page lists "FP7 & CIP Programmes" and "COSME" with links to "Calls" and "Call Updates". A "Horizon 2020" section features a globe image and text: "Horizon 2020 is the new EU funding programme for research and innovation running from 2014 to 2020, with a planned budget of €2.3bn. It will facilitate SME access to finance, create supportive environment for business creation, help small businesses operate outside their home countries and improve their access to markets." There is also a section for "FP7 and CIP - previous programmes" and "Other Funding Opportunities".



# First Horizon 2020 Energy Work Programme

## Basic principles:

- **2-year work programme to allow for better preparation of applicants**
- **Challenge-based approach (not prescribing technology options)**
- **Cross-cutting actions**
- **Use of TRLs to specify scope of activities**

# Technology Readiness Levels

- TRL 0: Idea.** Unproven concept, no testing has been performed.
- TRL 1: Basic research.** Principles postulated and observed but no experimental proof available.
- TRL 2: Technology formulation.** Concept and application have been formulated.
- TRL 3: Applied research.** First laboratory tests completed; proof of concept.
- TRL 4: Small scale prototype** built in a laboratory environment ("ugly" prototype).
- TRL 5: Large scale prototype** tested in intended environment.
- TRL 6: Prototype system** tested in intended environment close to expected performance.
- TRL 7: Demonstration system** operating in operational environment at pre-commercial scale.
- TRL 8: First of a kind commercial system.** Manufacturing issues solved.
- TRL 9: Full commercial application,** technology available for consumers.



## **Research and Innovation actions *Funding rate: maximum 100%***

- Actions primarily designed to establish new knowledge including testing and validating on a small scale laboratory prototype, Limited demonstration or pilot activities to show technical feasibility in a near to operational environment.

## **Innovation actions - *Funding rate: maximum 70%***

- Include prototyping, testing, demonstrating, piloting, large-scale product validation and market replication,

## **Coordination and support actions- *Funding rate: maximum 100%***

- Actions consisting primarily of accompanying measures such as e.g. standardisation, dissemination, awareness-raising and communication, networking, coordination or support services,

# Four Calls

- 1. Energy efficiency**
  - 2. Smart cities & communities**
  - 3. Competitive low-carbon energy**
  - 4. SME's and Fast Track to Innovation for Energy**
- *Other actions*

# ENERGY CHALLENGE (2014-2015)

## Low Carbon Energy



## Smart Cities & Communiti es



## Energy Efficiency



## SMEs and Fast Track to Innovatio n

# Call LCE: areas to be addressed

	AREA	TRL	TYPE
LCE 1	New knowledge and technologies	2 > 3-4	RIA
<b>Renewable electricity and heating/cooling</b>			
LCE 2	Developing the next generation technologies of renewable electricity and heating/cooling	3-4 > 4-5	RIA
LCE 3	Demonstration of renewable electricity and heating/cooling	5-6 > 6-7	IA
LCE 4	Market uptake of existing and emerging renewable electricity, heating and cooling technologies	7-9	CSA

# Call LCE: areas to be addressed

	AREA	TRL	TYPE
<b>Modernising the European electricity grid</b>			
LCE 5	Innovation and technologies for the deployment of meshed offshore grids	6-7 > 8	IA
LCE 6	Transmission grid and wholesale market		IA, RIA
LCE 7	Distribution grid and retail market		IA, CSA
<b>Energy storage technologies</b>			
LCE 8	Local/small scale storage	5 > 6	IA
LCE 9	Large scale storage	5 > 6-7	IA
LCE 10	Next generation technologies for energy storage	2 > 5	RIA

# Call LCE: areas to be addressed

	AREA	TRL	TYPE
<b>Sustainable biofuels and alternative fuels for transport</b>			
LCE 11	Developing next generation technologies for biofuels and sustainable alternative fuels	3-4 > 4-5	RIA
LCE 12	Demonstrating advanced biofuel technologies	5-7 > 6-7	IA
LCE 13	Partnering with Brazil on advanced biofuels	5-7 > 6-7	IA
LCE 14	Market uptake of existing and emerging sustainable bioenergy	7-9	CSA

# Call LCE: areas to be addressed

	AREA	TRL	TYPE
<b>Enabling the decarbonisation of the use of fossil fuels</b>			
LCE 15	Enabling decarbonisation of the fossil fuel-based power sector and energy intensive industry through CCS	4-5 > 6	RIA
LCE 16	Understanding, preventing and mitigating the potential environmental impacts and risks of shale gas exploration and extraction		RIA
LCE 17	Highly flexible and efficient fossil fuel power plants	3 > 4-6	RIA
<b>Supporting the development of a European Research Area in the field of Energy</b>			
LCE 18	Supporting Joint Actions on demonstration and validation of innovative energy solutions	5-6 > 6-7	ERA-NET
LCE 19	Supporting coordination of national R&D activities	2 > 5	CSA

# Call LCE: areas to be addressed

	AREA	TYPE
	<b>Social, environmental and economic aspects of the energy system</b>	
LCE 20	The human factor in the energy system	RIA, CSA
LCE 21	Modelling and analysing the energy system, its transformation and impacts	RIA
	<b>Cross-cutting issues</b>	
LCE 22	Fostering the network of National Contact Points	CSA



# ENERGY CHALLENGE (2014-2015)

## Low Carbon Energy



## Smart Cities & Communiti es



## Energy Efficiency



**SMEs and  
Fast  
Track to  
Innovation**

# Call SIE

## **1. SME Instrument: stimulating the innovation potential of SMEs for a low carbon and efficient energy system**

- **Phase 1: feasibility study, Phase 2: innovation project, Phase 3: commercialisation phase;**
- **Continuously open call**

## **2. Fast Track to Innovation – Pilot**

- **Covering all fields across LEITs (Leadership in enabling and industrial technologies) and Societal Challenges**
- **maximum of 5 partners/ maximum €3 M per project**
- **Continuously open call /Time to grant not exceeding 6 months**

# ENERGY CHALLENGE (2014-2015)

## Low Carbon Energy



## Smart Cities & Communiti es



## Energy Efficiency



## SMEs and Fast Track to Innovatio n

# Energy Efficiency

Focus area WP addresses 4 main areas:

- A) Buildings and consumers
- B) Heating and cooling
- C) Industry and products
- D) Finance for sustainable energy

# 1. Buildings and Consumers

PPP

- *Prefab. modules*
- *Historic buildings*
- *New EE buildings*
- *Demand response in building blocks*
- *ICT for EE*
- *Socio-eco. research*

- *Construction skills*
- *Organisational innovation*
- *Capacity-building for public authorities and other stakeholders*
- *Public procurement*
- *Consumer engagement*

## 2. Heating and cooling

Technology for district heating and cooling

Removing market barriers to the uptake of EE solutions

## 3. Industry and Products

- Innovation through large buyer groups
- Heat recovery

- Market surveillance
- Organisational innovation in industry

## 4. Finance for Sustainable Energy

- *Making investments more attractive*
- *Innovative financing and energy services*
- *Project development assistance including Other actions: ELENA-EIB Facility*

# ENERGY CHALLENGE (2014-2015)

## Low Carbon Energy



## Smart Cities & Communiti es



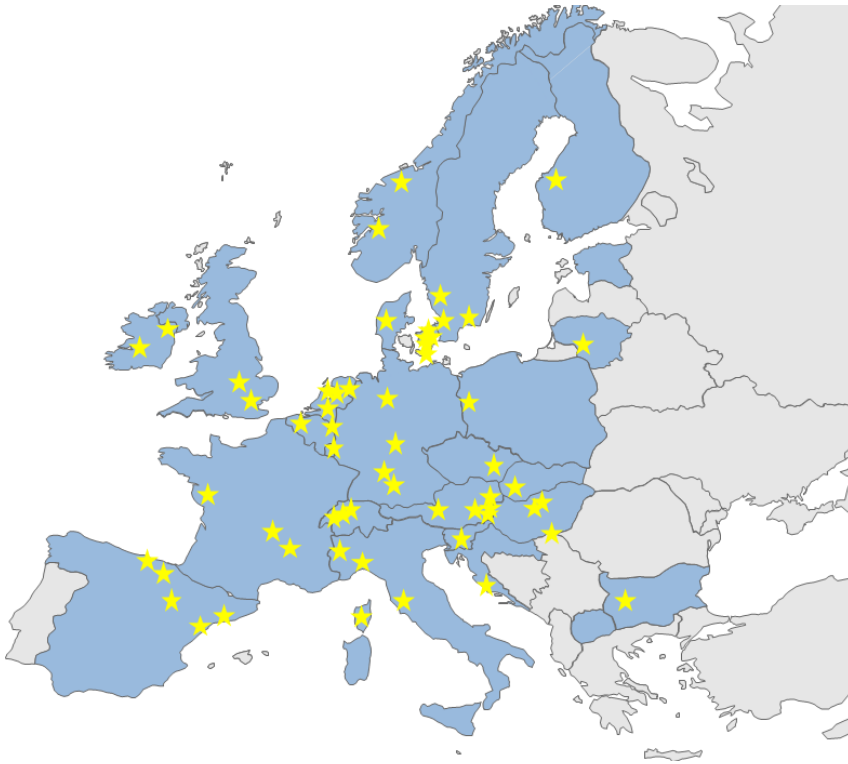
## Energy Efficiency



## SMEs and Fast Track to Innovatio n



# Innovate: Go beyond what exists



- *Concerto = 22 projects, 58 communities*
- *Take to the next level*
- [www.concerto.eu](http://www.concerto.eu)

# Smart cities and communities demo projects:

- *innovative lighthouse projects*
- *(Nearly zero) or Low energy districts*
- *Integrated infrastructures*
- *Sustainable urban mobility*
  
- *high replication potential*
  
- *exhaustive monitoring of operation/performance/efficiency*
  
- *cost effective measures*
  
- *communication/exchange of information*  
*Between users / inhabitants*  
*Decision makers / city authorities*



## Part B – other actions

- Support to policy development and implementation
- Support to Technology Platforms
- IEA Implementing Agreements
- etc.

# Indicative Call budgets

Calls	2014 (M€)	2015 (M€)
Energy Efficiency	97	98
Smart Cities and Communities	92	108
Competitive Low-Carbon Energy	363	374
SMEs and Fast Track to Innovation	34	51
<i>Part B – other actions</i>	75	61

## Useful links

*General information*

*<http://ec.europa.eu/programmes/horizon2020/>*

*Participants portal*

*<http://ec.europa.eu/research/participants/portal/desktop/en/home.html>*

# Work programme 2014-15

*[http://ec.europa.eu/research/horizon2020/pdf/work-programmes/secure\\_clean\\_and\\_efficient\\_energy\\_draft\\_work\\_programme.pdf](http://ec.europa.eu/research/horizon2020/pdf/work-programmes/secure_clean_and_efficient_energy_draft_work_programme.pdf)*

# Call Energy Efficiency: Deadlines

Topics*	2014	2015
EE1, EE3, EE18	20/03/2014	
EE4, EE5, EE7, EE8, EE9, EE10, EE11, EE12, EE13, EE14, EE15, EE16, EE19, EE20, EE21	05/06/2014	
EE2, EE18	09/12/2014	
EE5, EE6, EE7, EE9, EE10, EE11, EE13, EE14, EE15, EE16, EE17, EE19, EE20, EE21		10/06/2015

**\* Corresponds to the topic code in the work-programme**

# Call Energy Efficiency: Budget

Topics*	Short-hand Description	2014 (M€)	2015 (M€)
EE1, EE2	EeB PPP: Pre-fabricated modules and New Energy Efficient Buildings	8	9
EE3	EeB PPP: Historic Buildings	5	
EE18	SPIRE Topic PPP: Heat recovery	8	8
EE6, EE12, EE13	Demand response in building blocks, socio-economic research and technology for DHC	8,5	13,35
EE11	ICT for energy efficiency	8,5	8,5
EE4, EE5, EE7, EE8, EE9, EE10, EE14, EE15, EE16, EE17	Market uptake in Buildings, Consumers, Industry and Products  Empowering public authorities and its stakeholders	34,5	32,8
EE19, EE20, EE21	Finance for sustainable energy including project development assistance	25	26,5



# Call Smart cities & communities: Deadlines

Topics*	2014	2015
SCC1	07/05/2014	
SCC2, SCC4	07/05/2014	
SCC1		03/03/2015
SCC3, SCC5		03/03/2015

\* Corresponds to the topic code in the work-programme

# Call Smart cities & communities: Budget

Topics*	Short-hand Description	2014 (M€)	2015 (M€)
SCC1	SCC solutions	90,32	106,8
SCC2	Developping framework for monitoring	1	
SCC3	Developping system standard		1
SCC4	Public procurers networks	1	
SCC5	Prize		1

**\* Corresponds to the topic code in the work-programme**



# Call Competitive low-carbon energy : Deadlines

Topics*	2014		2015
LCE1, LCE2, LCE11, LCE15, LCE16	01/04/2014 (Stage 1)	23/09/2014 (Stage 2)	
LCE22	01/04/2014		
LCE4, LCE7, LCE8, LCE10, LCE14, LCE18	07/05/2014		
LCE1, LCE2, LCE11, LCE15, LCE17	03/09/2014 (Stage 1)		03/03/2015 (Stage 2)
LCE3, LCE12, LCE19, LCE20	10/09/2014		
LCE3, LCE12, LCE19, LCE21 LCE4, LCE5, LCE6, LCE9, LCE14			03/03/2015
LCE18			28/04/2015
LCE13			05/05/2015

\* Corresponds to the topic code in the work-programme

# Call Competitive **low-carbon energy** : Budget (M€)

Topics*	Short-hand Description	2014	2015
LCE1	New knoweldge & tech.	20	
LCE2, LCE11	RES – Research	60*	59*
LCE3, LCE12	RES - Demonstration	73*	80*
LCE4, LCE14	Market uptake	20	20
LCE5, LCE6, LCE7	Smart grids	60	71,48
LCE8, LCE9, LCE10	Storage	44,15	26
LCE13	Joint topic with Brazil		10
LCE15, LCE16, LCE17	CCS & other	33	35
LCE18	ERANET	34,25	57,85
LCE19	Coordination of MS	3	3
LCE20	Socio-Eco.	10,5	
LCE21	Socio-Eco.		10
LCE22	NCP Network	1,5	

**\* Corresponds to the topic code in the work-programme**

# Call SIE: Cut-Off Dates

## Topic SIE1 = SME Instruments

### Open for submission on **01/03/2014**

	2014	2015
Phase 1	18/06/2014 24/09/2014 17/12/2014	18/03/2015 17/06/2015 17/09/2015 16/12/2015
Phase 2	09/10/2014 17/12/2014	18/03/2015 17/06/2015 17/09/2015 16/12/2015

Budget	2014	2015
Phase 1	3,40	3,73
Phase 2	29,89	32,79
Mentoring & coaching and Phase 3	0,68	0,74
Budget	33,95M€	37,26M€

# Call Euratom Fission and Radiation Protection (NFRP): Deadlines

Topics*	2014	2015
All  NFRP1 to NFRP15  (excluding NFRP11)	17/09/2014	

\* Corresponds to the topic code in the work-programme

# Call Euratom Fission & Radiation Protection: Budget (M€)

Code *	Short-hand Description	2014	2015
NFRP1	Reactor safety	18,8	
NFRP2	Reactor accident source term	3,0	
NFRP3	New approache to reactor safety	6,0	
NFRP4	Radioactive waste managemnt - National programmes	1,4	
NFRP5	Radioactive waste geological repository - Licensing		1,2
NFRP6	Waste geological - 1st of the kind	14,6	
NFRP7	Radiation protection		20,5
NFRP8	Fuel and targets for medical radioisotopes		5,0
NFRP9	Transmutation		8,0
NFRP10	Education and Training		4,0
NFRP11	Energy system analysis (See LCE 21-2015)		
NFRP12	Interaction with society	2,5	
NFRP13	National Contact Points Network		0,4
NFRP14	Regional Initiative	2,0	
NFRP15	Support to SNETP Platform		0,5
TOTAL		48,3	39,6
B3	Access to Jules Horowitz research reactor		15,0
B6	GIF International Forum Secretariat	0,3	
GRAND TOTAL		48,6	54,6

\* Corresponds to  
Topic code in the  
workprogramme



# HORIZON 2020

**Thank you  
for your attention!**

**Find out more:**  
[www.ec.europa/research/horizon2020](http://www.ec.europa/research/horizon2020)