

EU Member States Energy Efficiency Policies for the Industrial Sector Based on the NEEAPs Analysis.

The European Commission's
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Joint Research Centre

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EU Member States Energy Efficiency

Policies for the Industrial Sector Based on the NEEAPs Analysis.

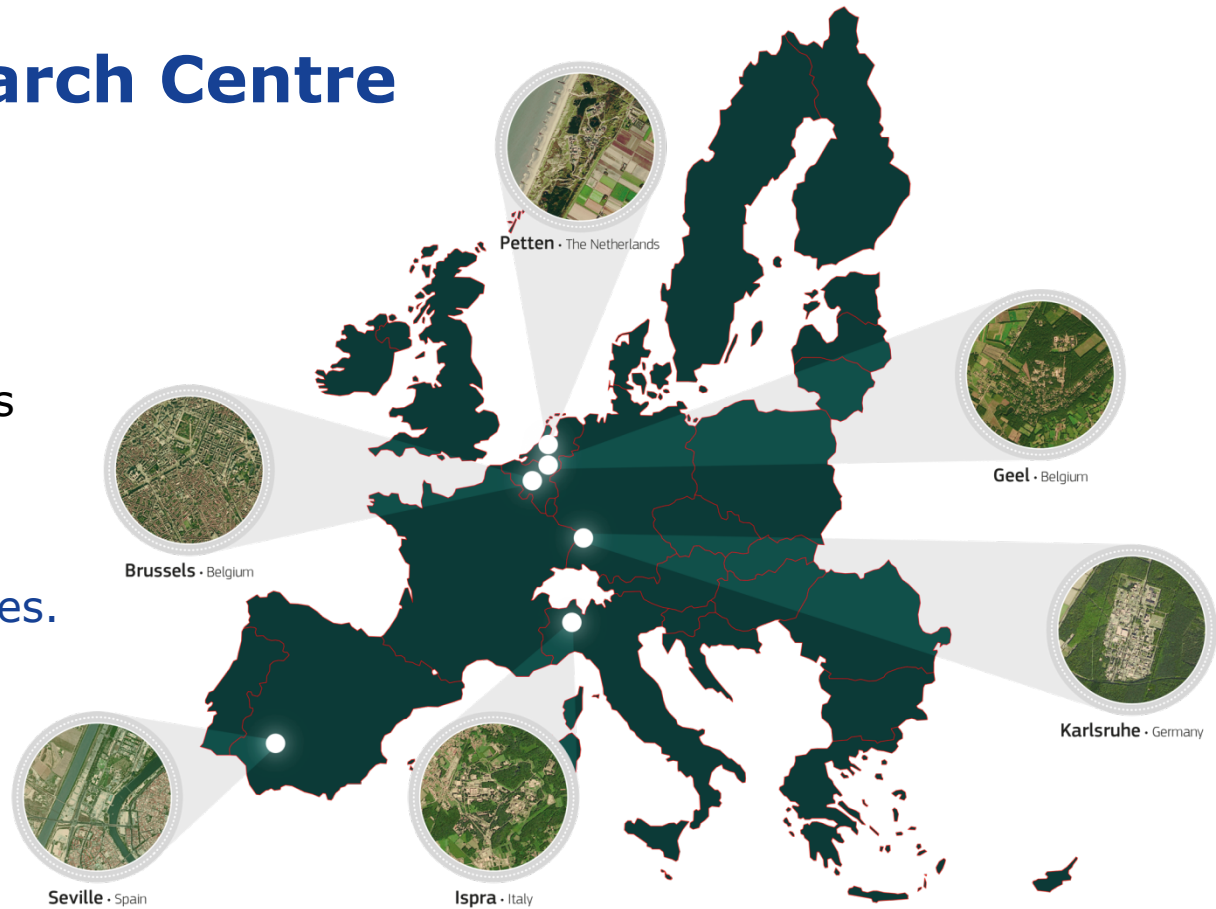
Paolo Bertoldi
paolo.bertoldi@ec.europa.eu



The Joint Research Centre at a glance

3000 staff

Almost 75% are scientists
and researchers.
Headquarters in Brussels
and research facilities
located in 5 Member States.



The EED

14.11.2012

EN

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(Legislative acts)

DIRECTIVES

DIRECTIVE 2012/27/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

of 25 October 2012

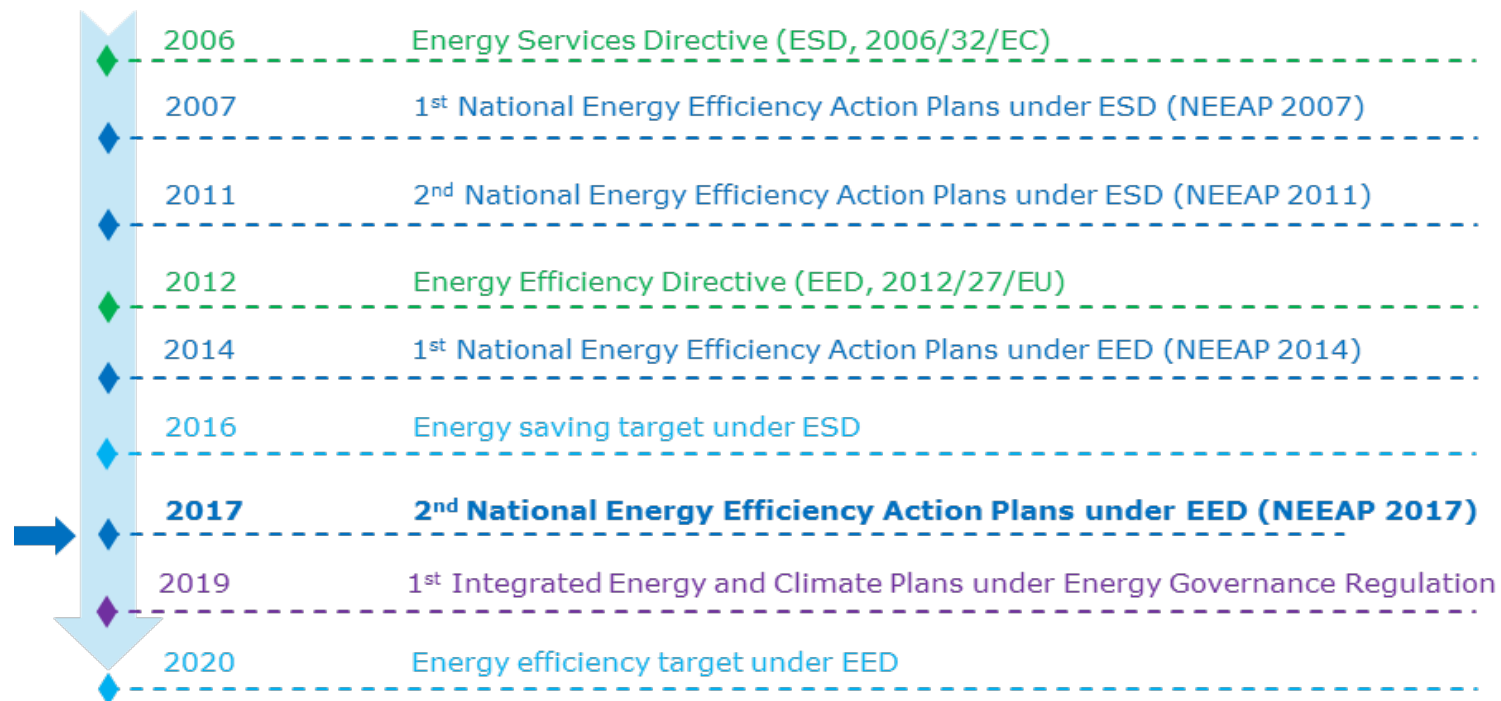
on energy efficiency, amending Directives 2009/125/EC and 2010/30/EU and repealing Directives 2004/8/EC and 2006/32/EC

(Text with EEA relevance)

THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE
EUROPEAN UNION,

Shifting to a more energy-efficient economy should also
accelerate the spread of innovative technological
solutions and improve the competitiveness of industry
in the Union, boosting economic growth and creating

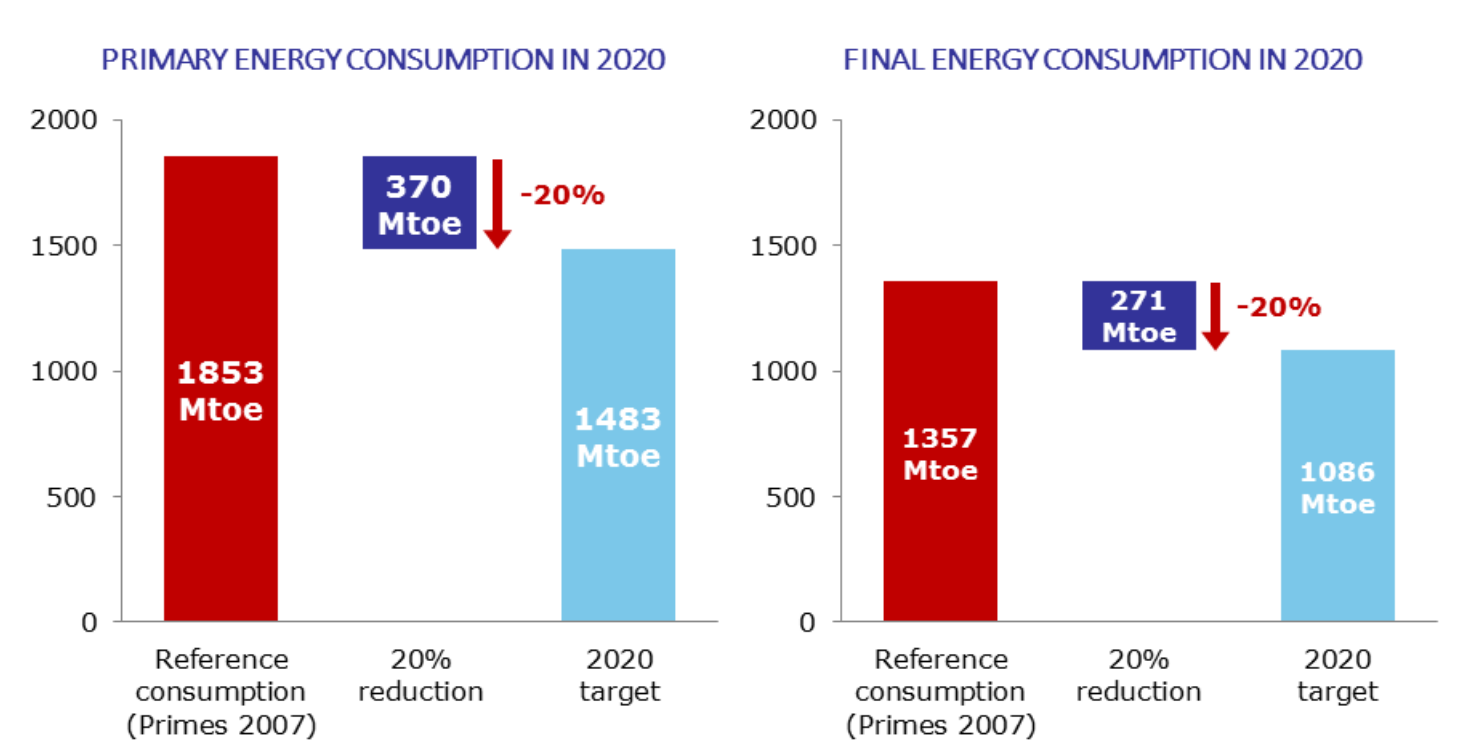
The EED Timeline - NEEAPs



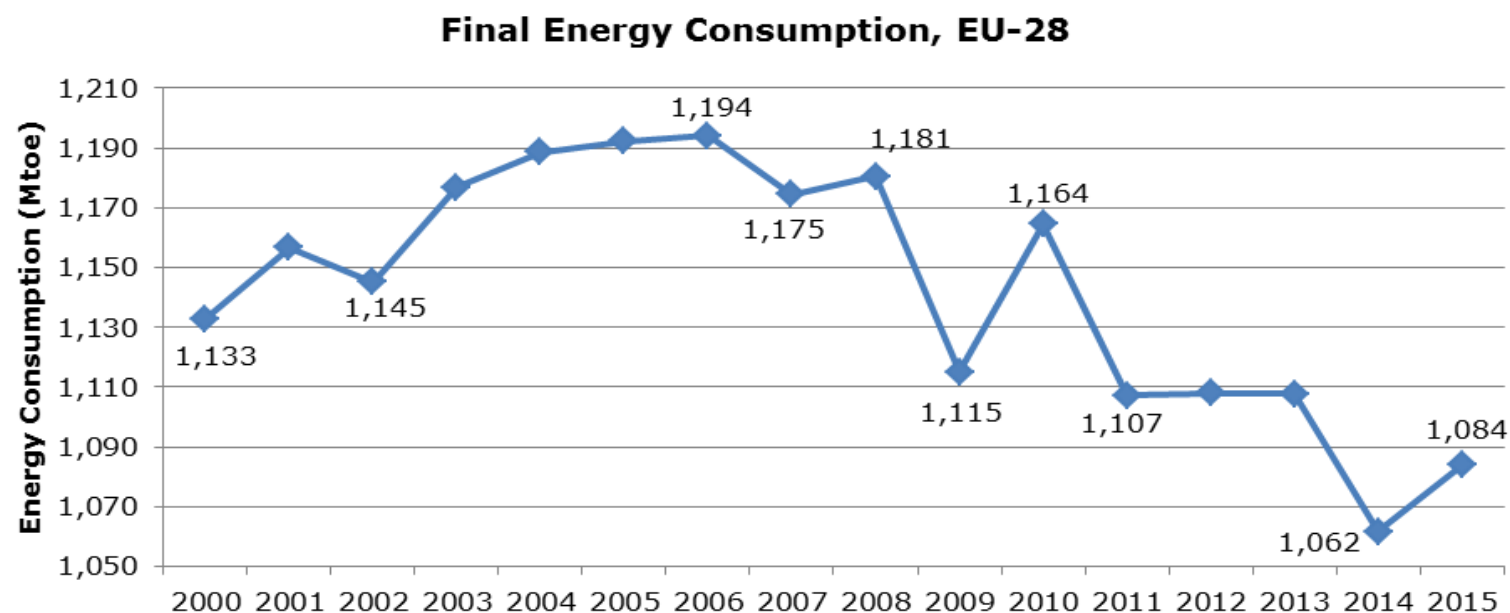
Role of the JRC in the EED implementation

- **Assessment of NEEAPs**
- Assessment of Art.4 Building Renovation strategies
- Art.18 – ESCO support
- **Art. 7 – Energy Efficiency Obligation Scheme**
- Art.5 – Central government buildings
- **Art.8 – Energy Audits and Energy Management Systems**
- Art. 9-11 – metering and billing
- Art. 12 – Behavioural changes
- Art. 15 – Demand Response
- Art. 19 – Split incentives

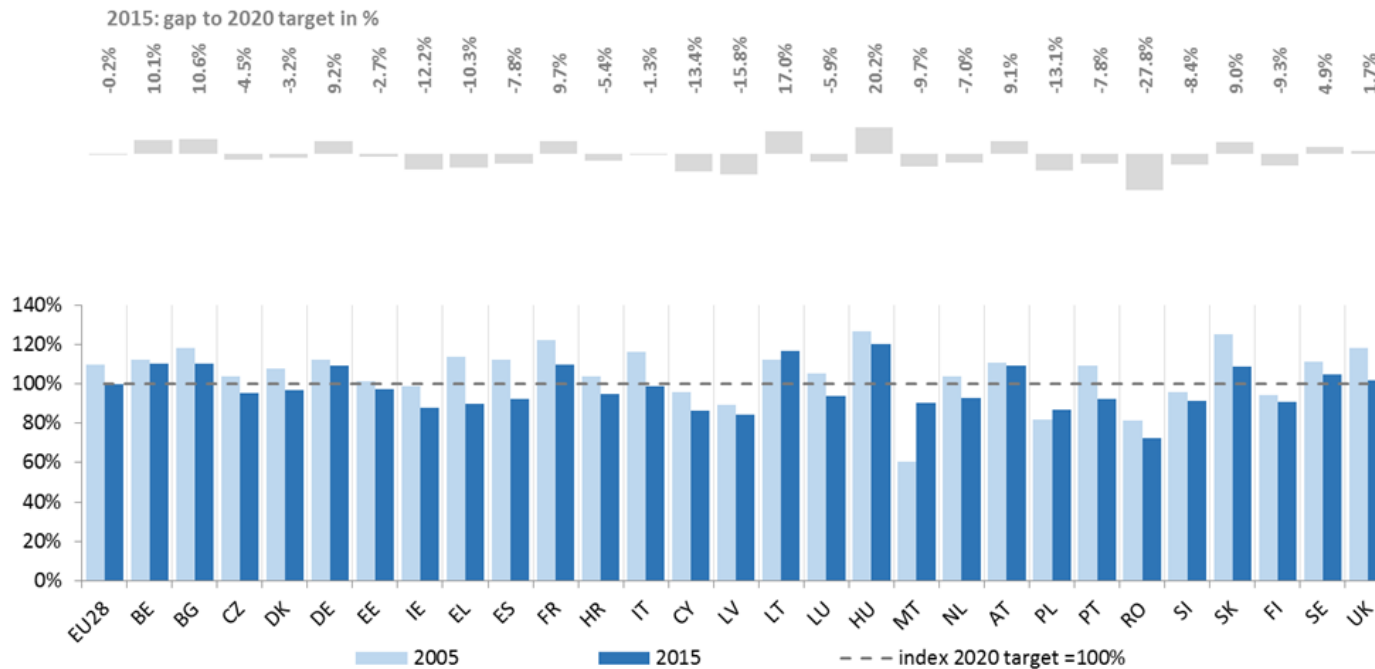
EE Targets for the EU-28



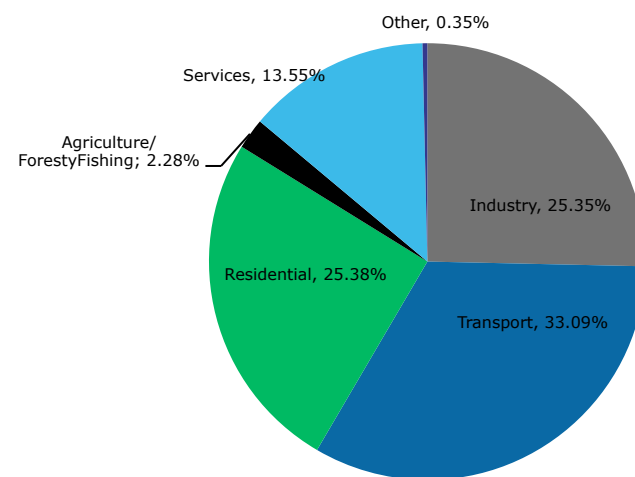
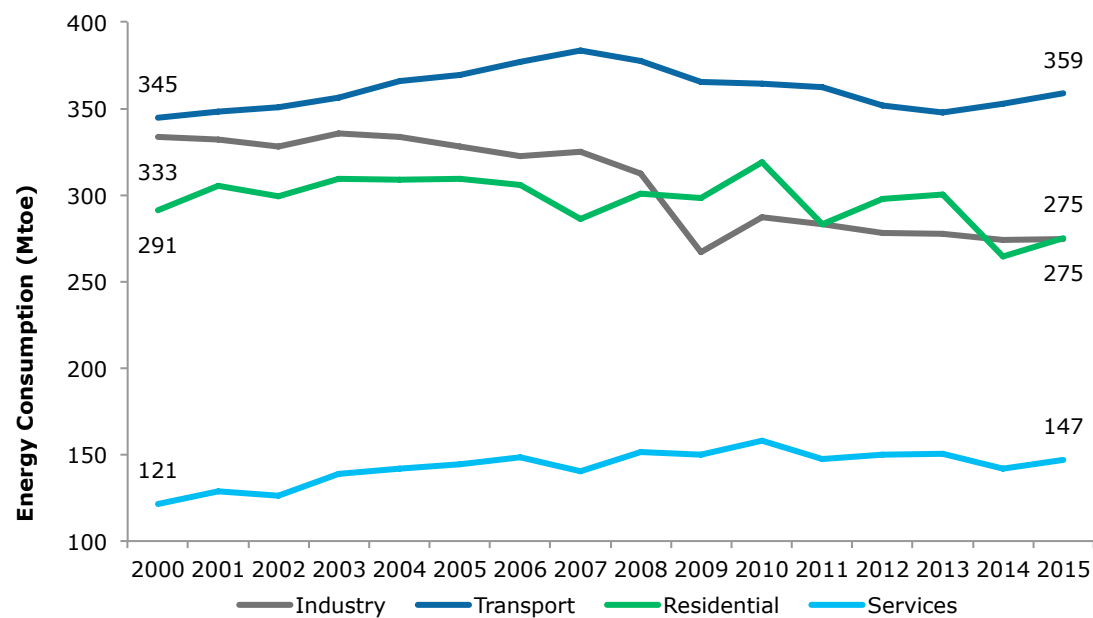
Final energy consumption in the EU-28, 2000-2015 (Eurostat)



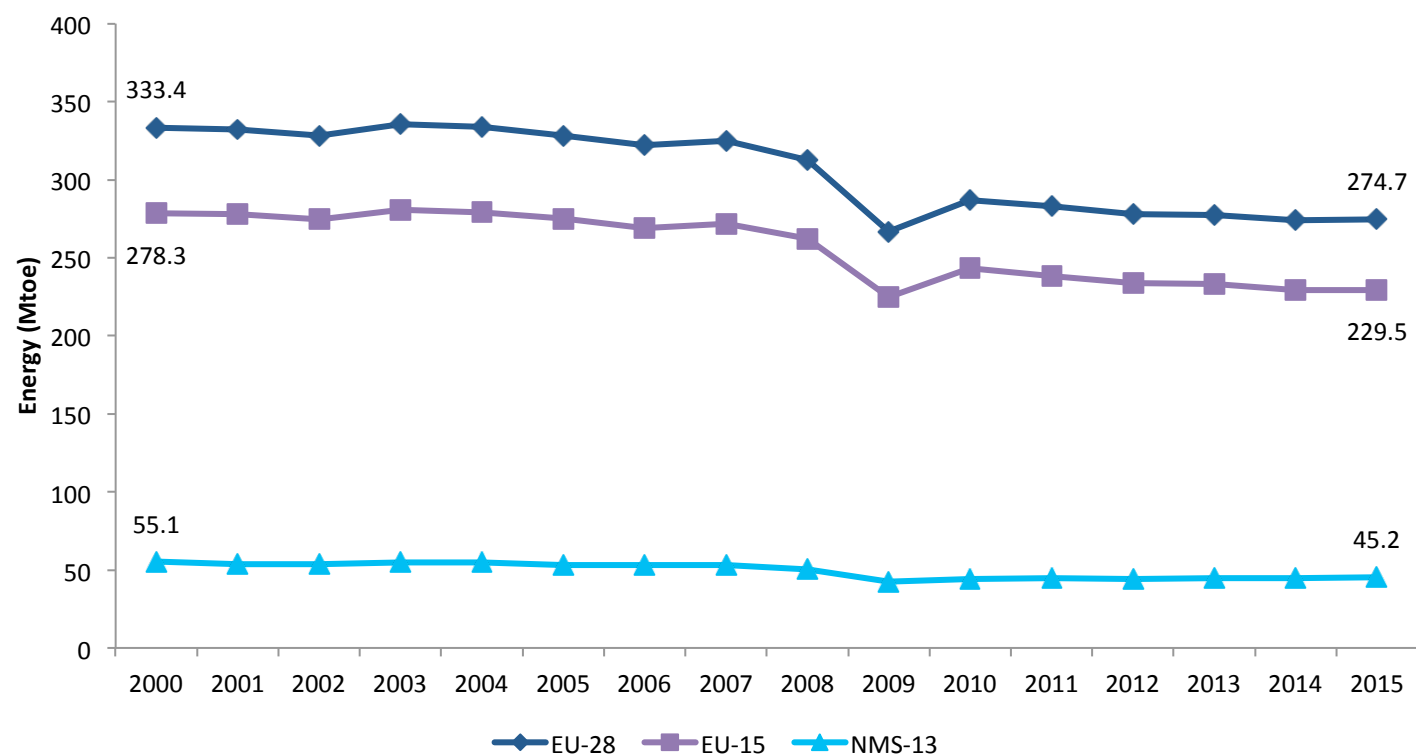
Final Energy Consumption Trends EU 28 – Individual contribution



Final energy consumption in the EU-28, by main sector



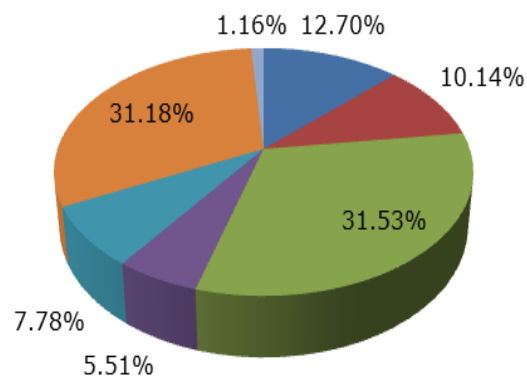
Industry



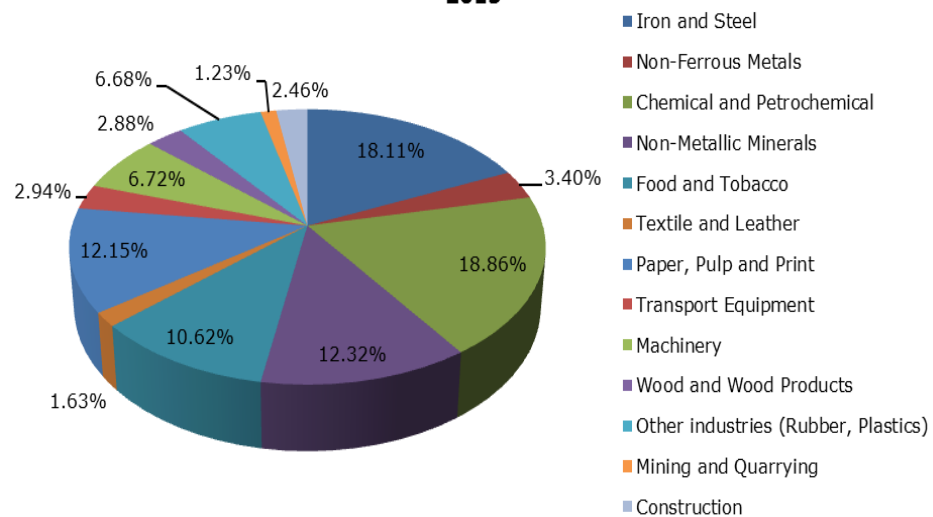
Industry

2015

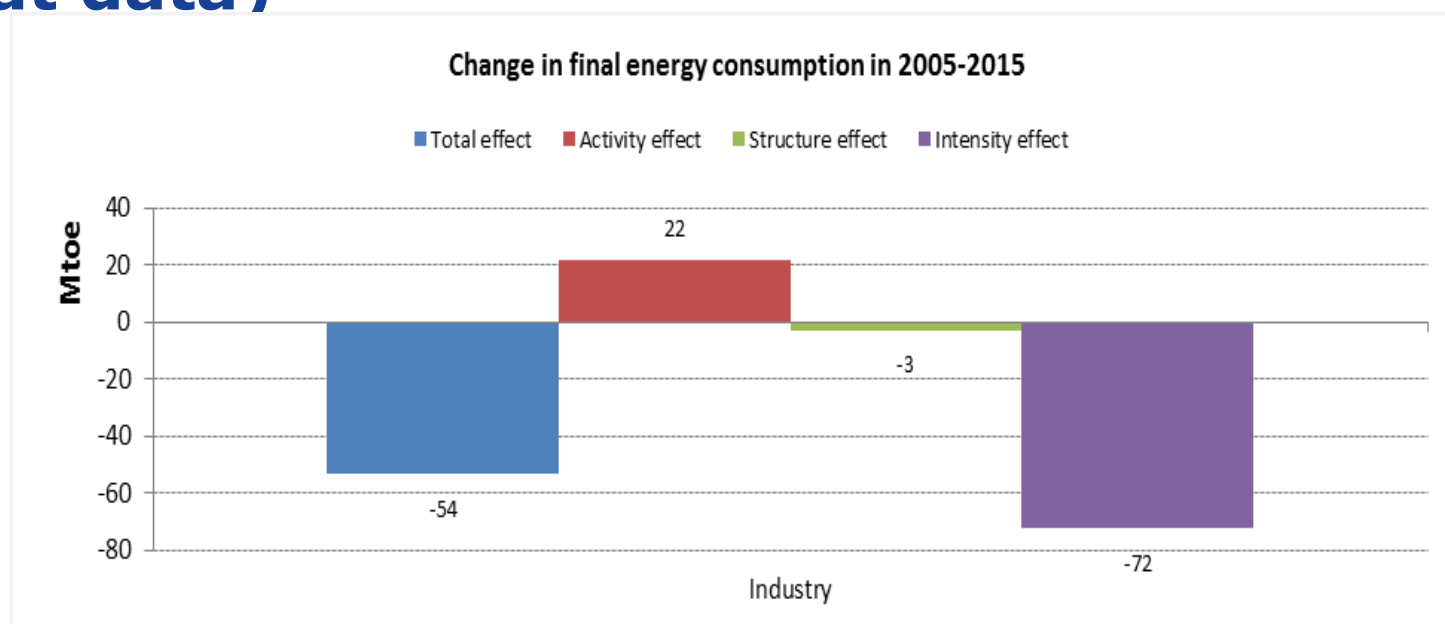
- Solid fuels
- Total petroleum
- Gas
- Derived heat
- Renewable energies
- Electrical energy
- Waste (non-renewable)



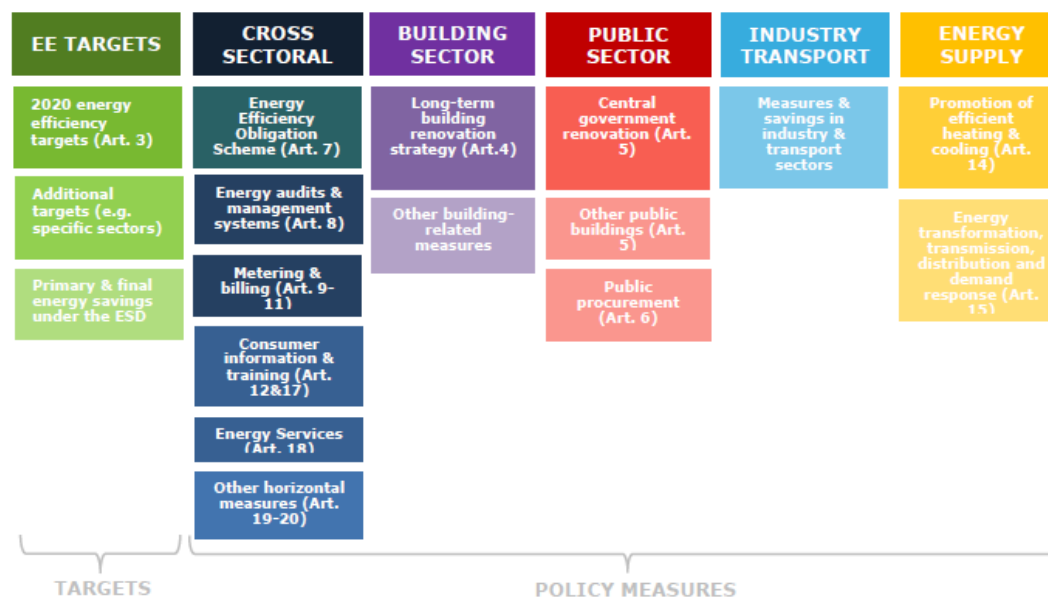
2015



Decomposition of final energy consumption of the EU28 industry (JRC analysis based on Eurostat data)



Energy Efficiency Measures in the EED



REGULATORY-FISCAL-INFORMATION-QUALIFICATION-MARKET BASED
 – VOLUNTARY ACTION – INFRASTRUCTURE INVESTMENTS

MS	Regulations, standards & other legislative measures								Funds, financial & fiscal measures (incl. taxation)								Market-based instruments (e.g. EEOS)								Information, knowledge & advice								Education, qualification & training								Other measures (e.g. voluntary agreements)									
	RSD	SRV	IND	TRN	AGR	SPP	CRS	PBL	RSD	SRV	IND	TRN	AGR	SPP	CRS	PBL	RSD	SRV	IND	TRN	AGR	SPP	CRS	PBL	RSD	SRV	IND	TRN	AGR	SPP	CRS	PBL	RSD	SRV	IND	TRN	AGR	SPP	CRS	PBL	RSD	SRV	IND	TRN	AGR	SPP	CRS	PBL		
BE	X	X	X	X		X	X		X	X	X	X	X	X				X	X	X	X					X	X	X	X					X	X						X	X	X	X				X		
BG			X					X	X	X	X	X										X																												
DK			X	X			X	X	X		X												X			X	X					X																		
DE	X	X	X				X		X	X	X	X				X																																		
EE	X	X	X						X	X	X					X																																		
IE	X	X	X	X					X																																									
EL	X	X		X				X	X	X	X	X			X	X	X						X			X	X						X		X	X					X						X			
ES									X	X	X	X			X	X										X	X		X																					
FR	X	X	X					X	X	X		X			X		X	X	X	X																														
HR								X	X							X																																		
IT		X		X			X	X	X	X	X	X			X	X																																		
CY	X	X							X	X	X	X				X																																		
LV									X	X	X																																							
LT	X	X	X				X	X				X			X					X																														
LU	X											X					X	X	X	X																														
HU	X	X							X	X	X	X			X	X												X																						
MT									X	X	X	X					X																																	
NL	X	X	X	X	X				X	X	X	X	X														X	X		X																				
AT	X								X	X	X	X				X	X										X	X	X	X																				
RO	X	X	X			X	X	X	X	X		X						X	X		X																													
SK	X	X	X						X		X	X				X																																		
FI	X	X					X		X			X	X																																					
UK	X	X	X	X					X	X	X	X																																						



European
Commission

Industry measures

- Measures in the industry sector are based on existing policies (taxation, financial incentives, voluntary agreements, audits, information and training)
- All MS have put into effect the mandatory requirement for EAs for non-SMEs (Article 8)
- Voluntary agreements - common policy instrument for the industry sector. 10 Member States have established agreements with industry actors:
BE (FL), DK, HR, FI, IE, LU, NL, PT, SE, UK

EE Policies in Industry (Voluntary)

- **DK** – Since 1996 EE agreements with large energy-intensive companies - Grants in exchange for a 3-year agreement on EnMS
- **NL** – Since 1992 Long Term Agreement – EE Plans, Annual Energy Consumption Monitoring, EnMS
- **IE** - >3000 SMEs in Voluntary Agreements
- **SE** – Programme for promoting EE in Energy Intensive organizations (since 2004)
- **HR** – Industrial EE Network
- **CZ, SK** – Voluntary Agreements to be started

Financial Incentives

- **FI** – EAs Programme – 1.7 M EUR per year (Finished after EED)
- **SK** – Energy Audits in Bratislava region
- **HR** – Grant scheme for EE in manufacturing industry and development of RES in industry
- **PT** – SGCIE promotes EE in intensive energy consuming (>500toe): Energy audits and Energy Rationalization plan
- **BE (FL)** – Grants through the Ecology Grant Plus programme
- **IE** – Accelerated Capital Allowance grants for efficient equipment
- **LV** – Grant Scheme for renovation of Industrial Buildings
- **FR** – Subsidized loans for EE investments

Conclusions

- The EED offers a good framework that complements other directives (Eco-design, Energy Labelling, EPBD)
- Helps MS adopt targets and structure their EE policies to meet the targets
- EED has been a driver for new measures in the MS. But still the majority are old measures.
- NEEAPs are the backbone of the EE EU policies

Conclusions

NEEAPs are strategic platform:

- for MS to set EE targets
- Outline end-use and supply level measures
- Several measures arrive from implementation of other EU Directives
- Most Industry measures are existing prior to EED (e.g. Voluntary schemes)
- Mandatory EAs and EnMS are a main Industry measure
- Financing (Grants, loans, and accelerated depreciations) also a very popular measure
- Energy consumption has been decreasing, but...

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