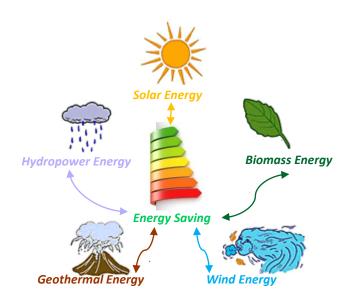


Clean Energy for All Europeans package Do the Commission's Impact Assessments Assign the

Right Role to Energy Efficiency?



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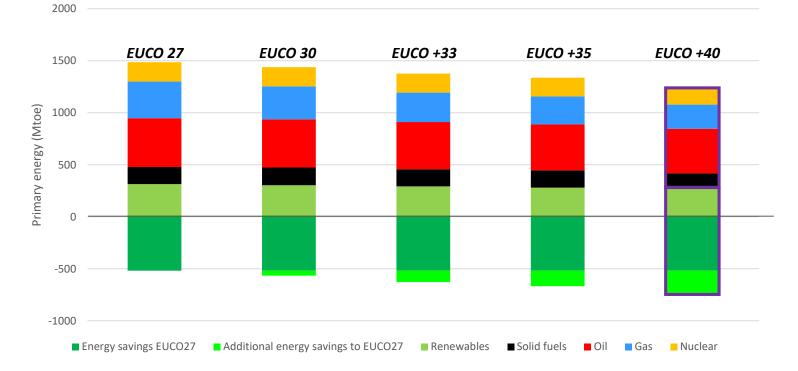
Making the Negawatt dream a global reality



Energy savings are projected to be the "First Fuel" of Europe in 2030 in each of the EUCO scenarios



EU 2030 primary energy mix in the Commission's scenarios



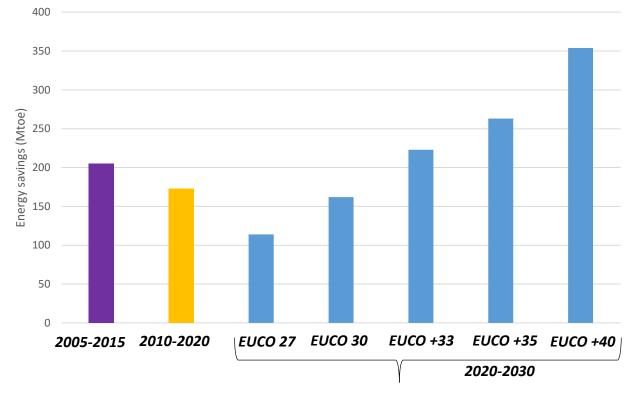
In the EUCO+40 scenario, the sum of RE and energy savings is projected to overtake the sum of fossil fuels and nuclear

Source: PRIMES 2016



Energy savings' ambition for the next decade in EUCO27 and EUCO30 is lower than the one of the current decade





Energy savings in the EUCO+40 scenario are more than double of those in the EUCO27

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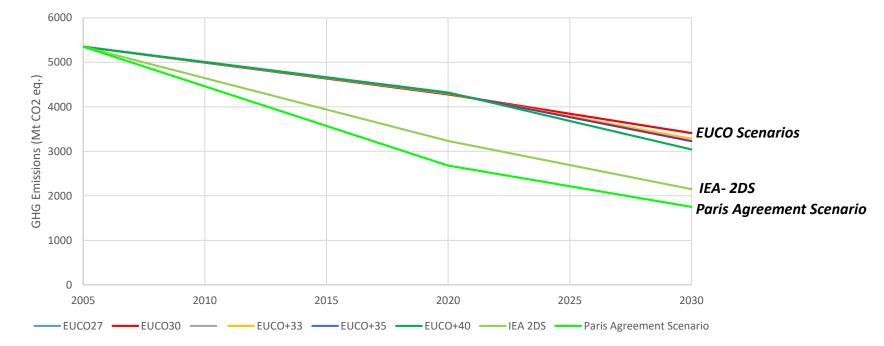


EUCO scenarios are not aligned with the EU obligations under the Paris Climate Agreement



EU 2030 GHG emissions in EUCO scenarios,

IEA 2DS and under the Paris Agreement



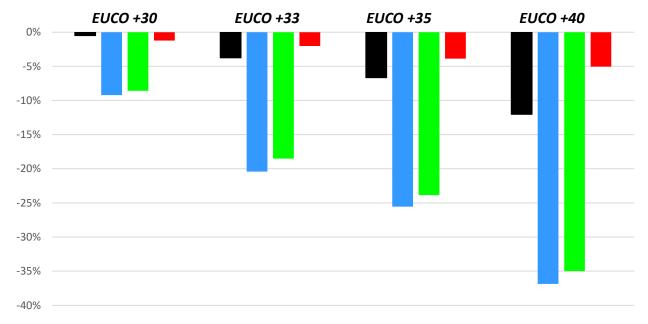
40% Energy Savings target, combined with ambitious RE target, should be the baseline scenario for 2030

Source: PRIMES 2016 for EUCO, ETP 2017 for IEA 2DS and Own estimates for Paris scenario OPENEXP

EUCO scenarios project buildings to lead the decarbonisation of the demand side



Changes in final energy demand per sector in EUCO scenarios compared to EUCO27





But renovation rates used for EPBD modelling (BEAM²) are much lower than those resulting from EED modelling (PRIMES) @Open.com

Source: PRIMES 2016

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The cost-effectiveness argument used against higher EE ambition is not backedup with the modelling results as direct EE investment costs are unknown

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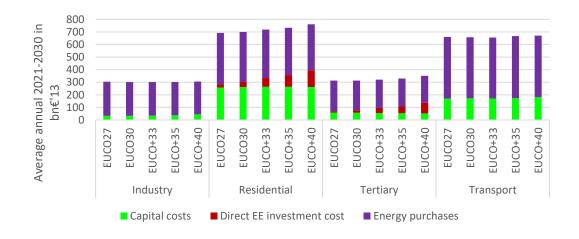
OPENEXF

Investment expenditures in EUCO scenarios

800 Investment expenditures (€ bn 10)200 Average 100 EUCO27 EUCO30 EUCO+33 EUCO+35 EUCO+40 Generation and industrial boilers Grid Transport Residential Tertiary Industry

Transport sector hinders efficiency ambition with high investment expenditures and low contribution to GHG emissions reduction

Energy system costs in EUCO scenarios



Direct EE investment costs are based on private discount rate and provided only for insulation of buildings

GHG emissions reduction will be driven by the increased ambition of energy savings and the increased share of renewables and not by ETS carbon price

OPFNEX

		OPENEAP			
	EUCO27	EUCO30	EUCO+33	EUCO+35	EUCO+40
ETS carbon price (€/t of CO ₂ eq.)	42	27	27	20	14
Total GHG emissions reduction					
compared to 1990	-40,7%	-40,8%	-43,0%	-43,9%	-47,2%
Share of RE in gross final energy					
consumption	27%	27%	28%	28%	28%
Energy savings target	27%	30%	33%	35%	40%
Ratio of energy related costs					
(inclusive of auction payments					
ETS) to value added for energy					
intensive industries	40.8%	40.1%	40.0%	39.8%	40.6%
Total energy related costs in					
industry (annual average €bn	212 4	200.0	200 4	207.2	211.4
'13)	212.4	208.8	208.4	207.2	211.4

Ambitious energy savings scenarios are not expected to adversely impact EU

competitiveness



Concluding remarks



- The baseline scenario should be based on 40% EE target combined with high RE target to align Europe's GHG domestic targets with its obligations under the Paris Climate Agreement.
- Coherence between sectoral modelling and EED modelling is needed.
- Investment expenditures and energy system costs per sector should be consistent with the contribution of each sector to Europe's GHG emissions reduction targets.
- EE investments costs and their underlying data should be disclosed for all sectors.
- A societal approach to discount rate and the effects of the EU guarantee on lowering EE investment costs should be reflected in the modelling exercise.



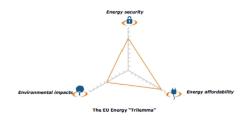


For more information, download from <u>www.openexp.eu</u>



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Thank you for your attention

