ENERGY EFFICIENCY FIRST!

5 REASONS WE NEED A HIGHER TARGET FOR 2030

1% IMPROVEMENT IN EFFICIENCY = LIFTING 7 MILLION PEOPLE OUT OF ENERGY POVERTY + SAVING THE ENERGY EQUIVALENT OF 60 SUPERTANKERS OF OIL

INCREASED SAVINGS ON HEALTH & POLLUTION CONTROL COSTS

Compared to 27% efficiency

30% = UP TO €8.3BN SAVINGS PER YEAR

40% = UP TO €41.5BN SAVINGS PER YEAR

INCREASED GDP

Compared to 27% efficiency

30% UP TO 0.73%

40% UP TO 3.17%

REDUCED DEPENDENCY ON ENERGY IMPORTS

€290BN SAVED

30% -15%

€528BN SAVED

40% -34%

SPEND LESS

Savings on fossil fuel imports compared to business as usual

USE LESS

Gas demand drops dramatically with a 40% target

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REFERENCES

Every 1% means lifting 7 million people out of energy poverty: a quote by Commissioner Miguel Arias Cañete in Reuters (09/09/2016). The estimate divides the additional investment needed in the buildings sector to meet a higher target by the cost of upgrading homes to a 'deep renovation' standard. There are currently about 55 million energy poor in Europe, i.e. people who cannot afford to adequately heat or cool their homes.

Every 1% improvement in energy efficiency means saving the equivalent of 60 supertankers of oil: An additional 1 percentage point of energy savings (e.g. going from 39% to 40%) translates into about 20 mtoe (million tons of oil equivalent). This is the equivalent of about 140 million barrels of oil or 60 of the biggest supertankers. It is a huge amount of energy: increasing the EU's efficiency target is a perfect example of acting big on big things.

Savings on pollution control and health costs increase very significantly with higher ambition. See p56 of the draft impact assessment.

Increased GDP: see p104 of the draft impact assessment. The numbers quoted here are from the Cambridge Econometrics 'no crowding out' scenario. See more details on GDP modelling below.

Data on **fossil fuel cost savings** is on p45. **Gas demand** numbers are on p39.

More details on consumer benefits:

Real income increases for all income levels with higher levels of ambition on energy efficiency, though most of all for the lowest income level (see p59). This shows that the investment requirements of energy efficiency are more than compensated by lower energy costs. Meanwhile, standard of living and productivity increase because buildings are better insulated and more pleasant to live / work in.

Electricity prices are roughly the same with all levels of ambition, though lowest with the 30% and 33% target settings (p46).

GDP and employment impacts were assessed with four different modelling settings. Three show positive results with a higher energy efficiency target, e.g. because of increased investment, job creation and reduced capital outflows for energy imports. The fourth setting – the National Technical University of Athens 'self-financing' model – predicts a slight decrease in GDP. However, this model setting is less realistic because it assumes '*no borrowing is possible and businesses and households [must] finance their investments in energy efficiency by spending less on other items*' (see p47). When the modelling assumes that economic agents are allowed to borrow money – as would be the case in a real world situation – economic results are positive.

Energy system costs (the sum of investments and fuel costs) are lowest in the 30% scenario (in the 2021-2050 timeframe). See p65. Overall, there is little difference between the scenarios, because the higher investment requirements with upper end targets are compensated by lower fuel costs. Note that energy system costs do not take into account the GDP, employment, health, environment and other benefits which increase with higher ambition.

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