

Energy efficiency in Denmark

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Agenda

- The Danish Energy Commission
- Denmark's view on energy efficiency
- Main EE measures in Denmark
- EE measures in industry
- EE measures in buildings
- Energy efficiency obligation scheme
- Conclusions

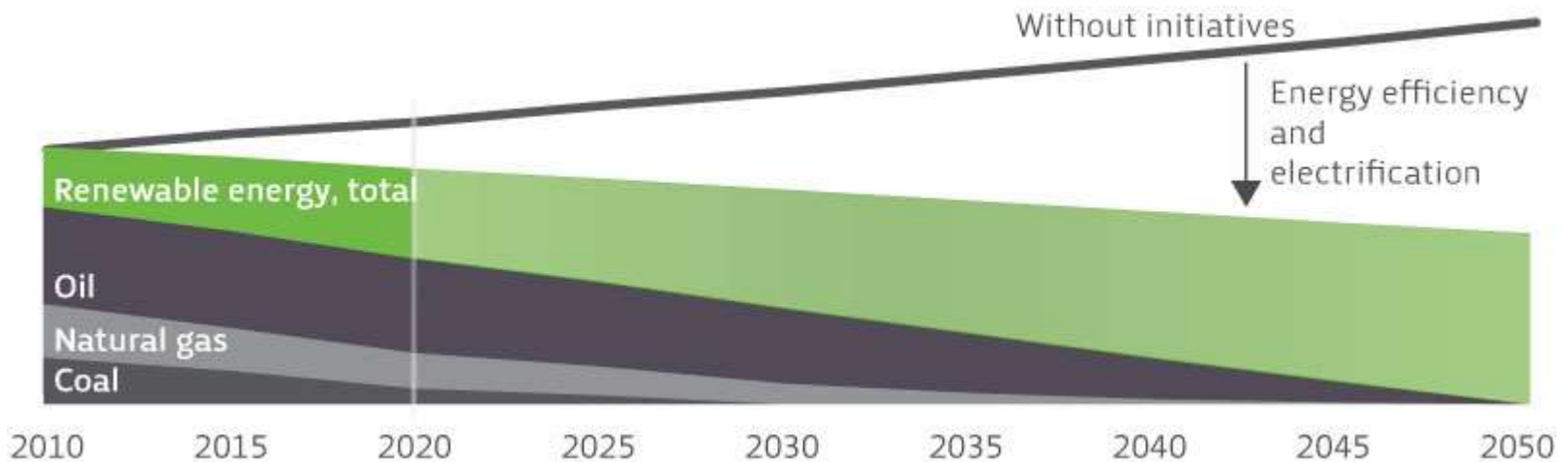
The new Danish Energy Commission

- Danish energy policies are based on a political energy agreement (2012-2020)
- As preparation for a new agreement an “Energy Commission” is appointed
- Recommendations for future cost-effective fulfillment of international climate commitments
- Current uncertainty about post 2020 policies
- Lays the ground for future Danish energy policies



Denmark's view on energy efficiency

Denmark has as its long term goal to become independent of fossil fuels by 2050, producing sufficient renewable energy to cover the total Danish energy consumption. Increased energy efficiency is a key element in achieving this goal.



Important with continued ambitious efforts



- Low carbon society, improved competitiveness and energy security
 - Cost-effective transition of energy system - Central to fulfil EU 2030 target on energy efficiency.
 - Broad energy efficiency progress at Member State level
 - Common EU measures important!
 - **The Energy Efficiency Directive (EED) important instrument to reach EU target**
 - Danish export industry is spurred by ambitious targets
 - Support **system of governance** to enable the Commission to keep track on member states efforts on energy efficiency – to avoid under implementation.
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Main EE measures in Denmark

Taxes on energy and CO2

- Incentives to reduce consumption

Regulation

- Standards, norms, etc.
- Especially buildings and products – and cars, etc.

Information, campaigns, etc.

- Both to end-users and to installers, etc

Help to implement savings

- Obligations for energy providers, subsidies, etc.
- Especially existing buildings and private enterprises

Combinations are important



Danish Energy
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**MANDATORY
ENERGY AUDITS
FOR LARGE
COMPANIES**

**SUBSIDY TO
ENERGY INTENSIVE
COMPANIES**

**ENERGY EFFICIENCY
MEASURES IN INDUSTRY**

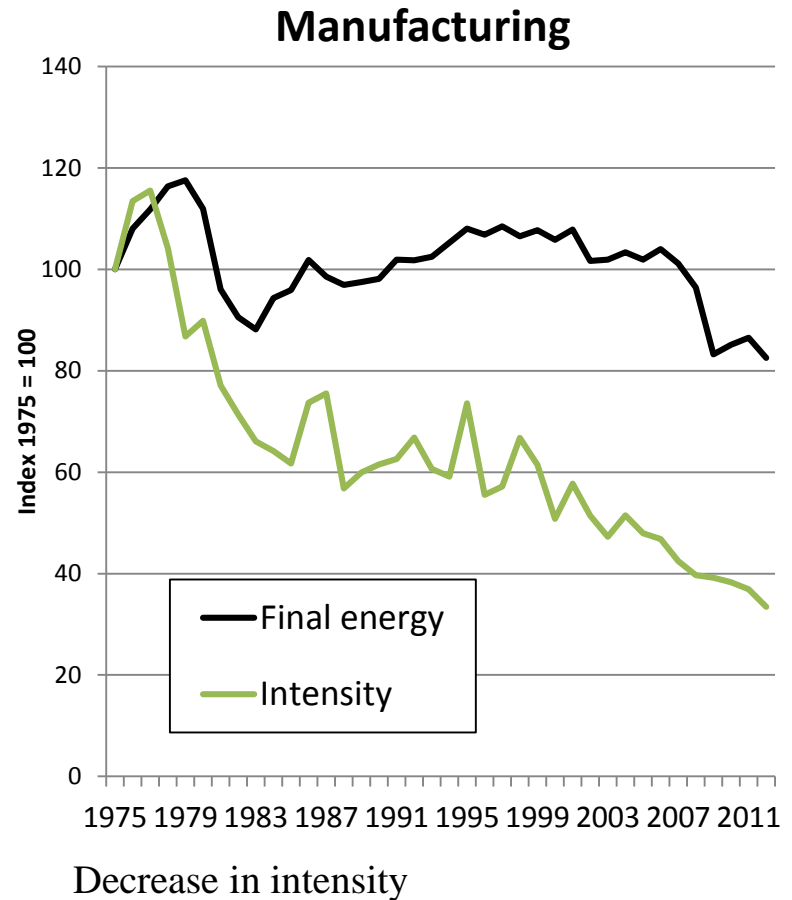
**ENERGY EFFICIENCY
OBLIGATION
SCHEME**

**RENEWABLE ENERGY
FOR INDUSTRIAL
PROCESSES**

**CENTER FOR ENERGY
SAVINGS IN
ENTERPRISES**

High efficiency improvement in industry

- CO2-packages in 1993 and 1996
 - CO2-tax
 - Voluntary agreements scheme
 - Subsidy scheme
- Involvement of energy utilities since 1993
 - Strong focus on industry



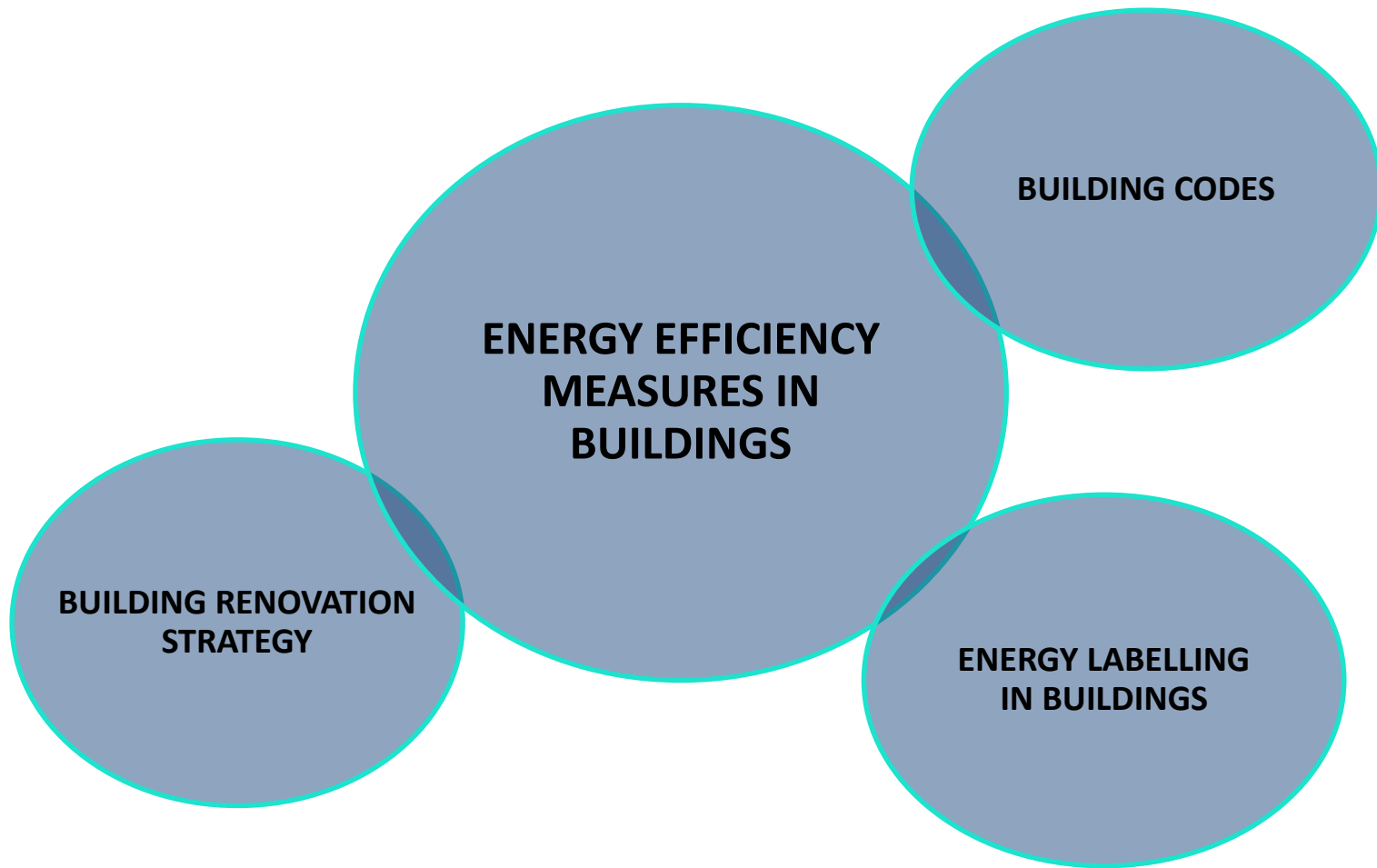
Subsidy scheme for energy intensive companies

Voluntary agreement scheme introduced in 1996

- Aiming at companies with a high energy intensity
- Voluntary agreement on energy efficiency
- In return, the companies get a refund of energy taxes (around 1/3 of the tax)

A new scheme was introduced last summer

- Based on a broad political agreement on growth (2014)
- 185 mio. DKK yearly in 2015-2020



Buildings: Big savings over the last 35 years

Almost 50% lower final consumption per m²

- Very strong improvement from 1979 to 1984

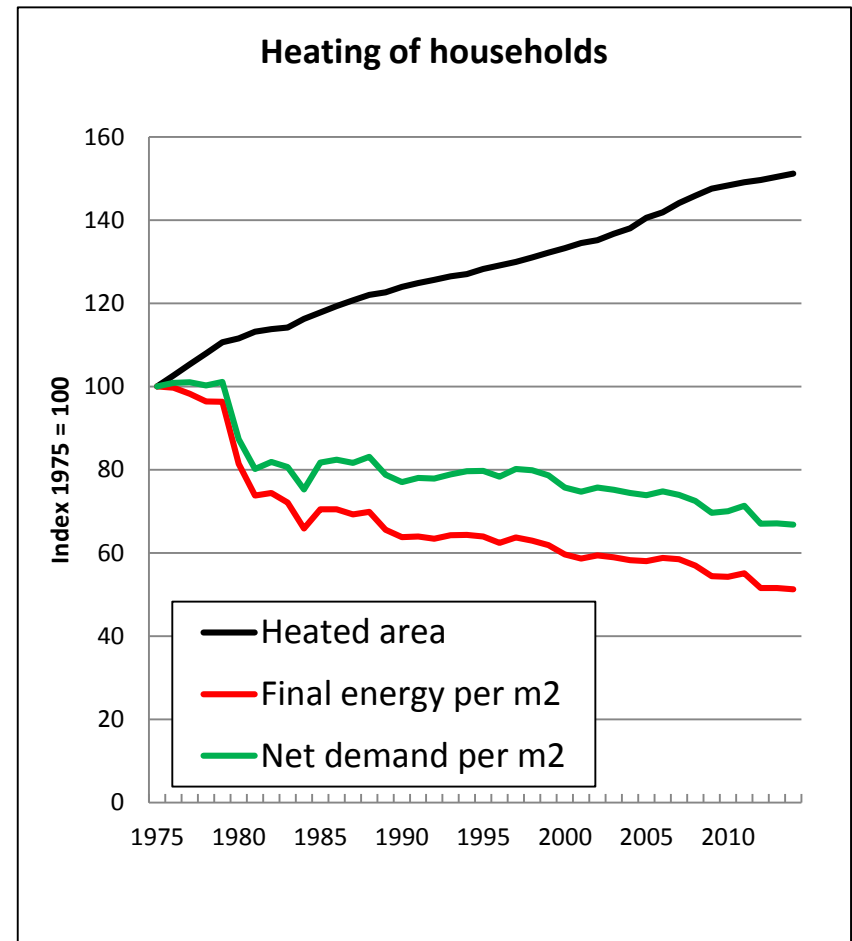
Reduction of demand – 35%

- Insulation, windows, etc.

More efficient supply

- District heating and more efficient boilers

35-40% of energy consumption still in buildings

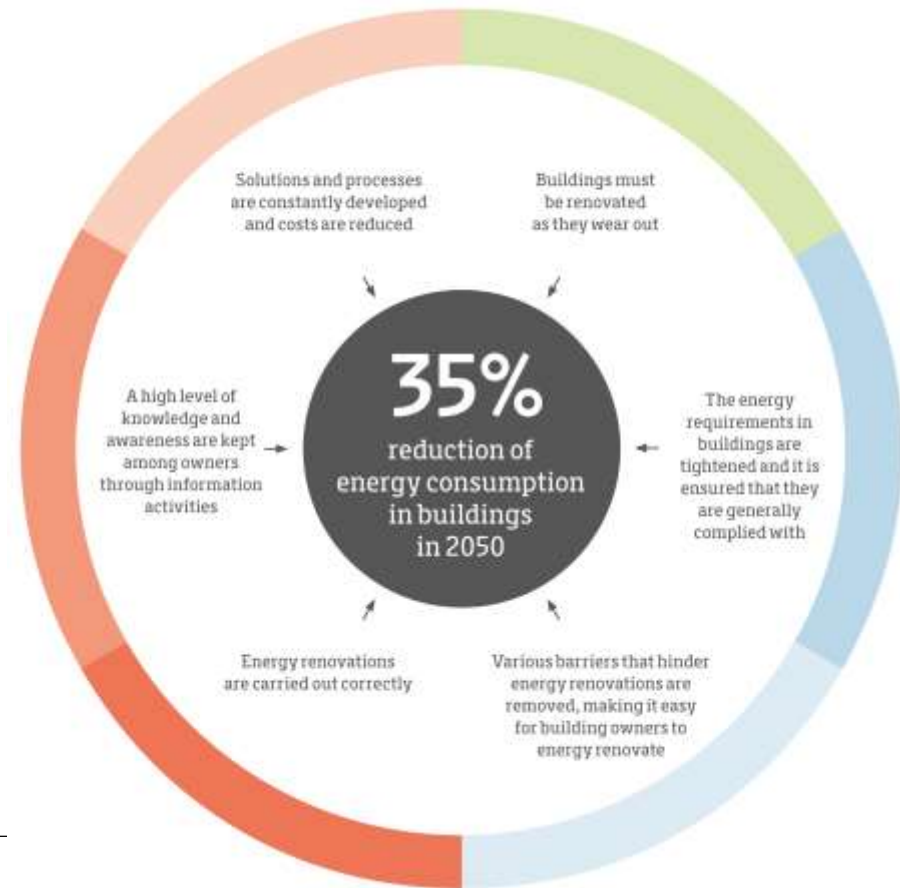


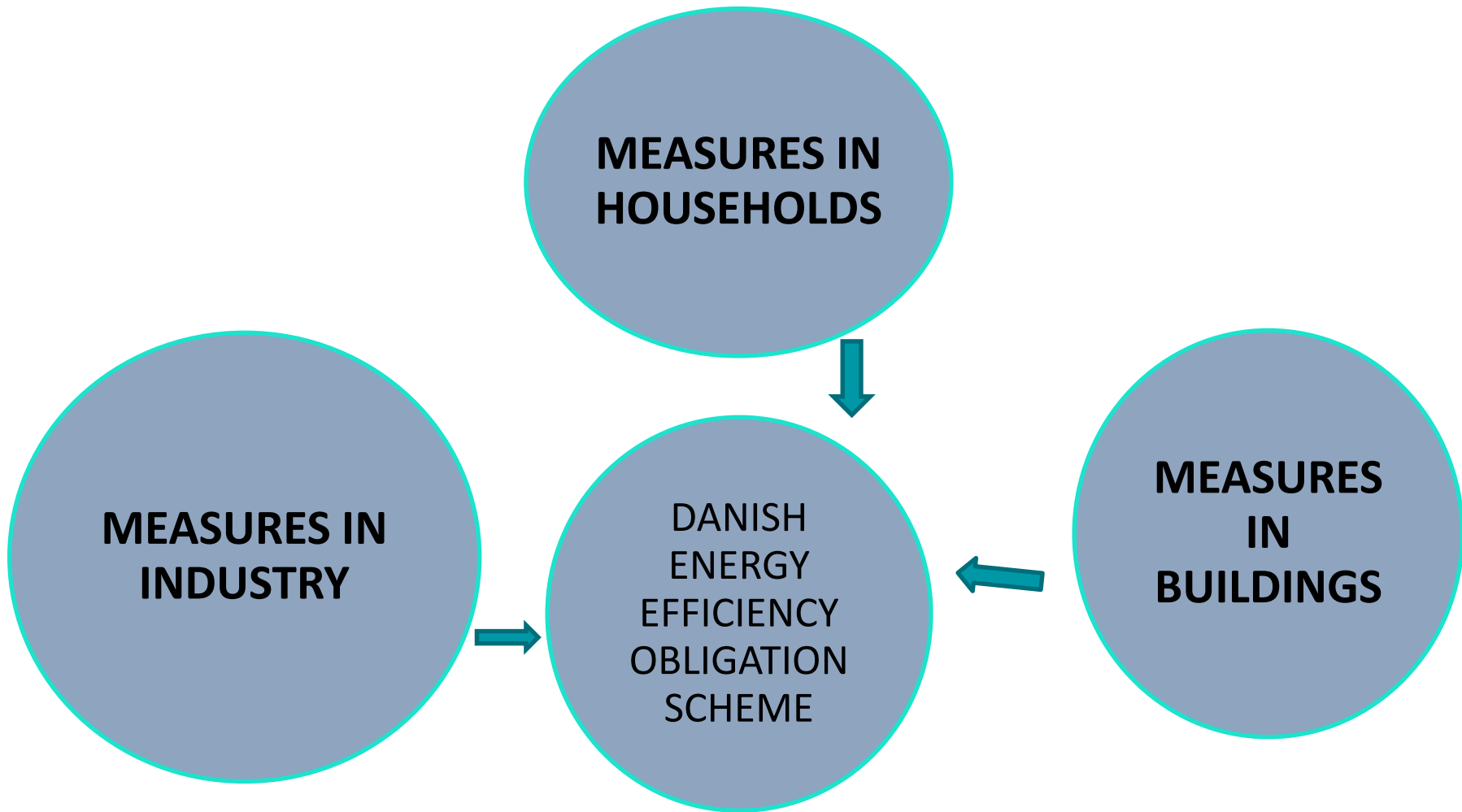
Building renovation strategy

- Government strategy 2014
- 21 initiatives
- Combination of measures
 - Strong requirements in building code
 - Energy certification of buildings
 - Make it easy
 - Financing and economic incentives
 - Education – knowledge

Important with continued efforts after 2020 to achieve these goals!

Figure 8 Energy policy initiatives for energy renovation





Danish Energy Efficiency Obligation scheme

- Obligation for distribution companies – achieve annual saving target for end users
 - Large freedom to deliver in the best way
 - Focus on cost-efficiency – lowest cost for utilities
 - Financed over the energy bill
 - Not from the state budget
 - Has proven to be a cost-effective measure to reach savings
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Conclusions

- DANISH GOVERNMENT CURRENTLY WORKING ON PREPARING THE FUTURE ENERGY POLICIES AFTER 2020
- ENERGY EFFICIENCY IS THE MAIN AND CHEAPEST SOLUTION TOWARDS INDEPENDENCE OF FOSSIL FUELS – THE TECHNOLOGIES ARE AVAILABLE
- A STABLE POLICY FRAMEWORK IS IMPORTANT TO ENSURE LONG TERM COMMITMENT
- COMBINATION OF MEASURES ARE NEEDED
- IMPORTANT WITH COMMON EUROPEAN MEASURES TO REACH OUR EU TARGETS ON ENERGY EFFICIENCY AND TO MAKE SURE ALL MEMBER STATES CONTRIBUTE.

Thank you for your attention

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