

INSPIRING IDEAS AND TALENT

# French policies for energy efficiency in buildings



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# The building sector : Leverage of the French Energy Transition

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Commitment to cut GHG by 2050 to 75%

→ to lower final energy consumption to 50% below 2012 levels by 2050

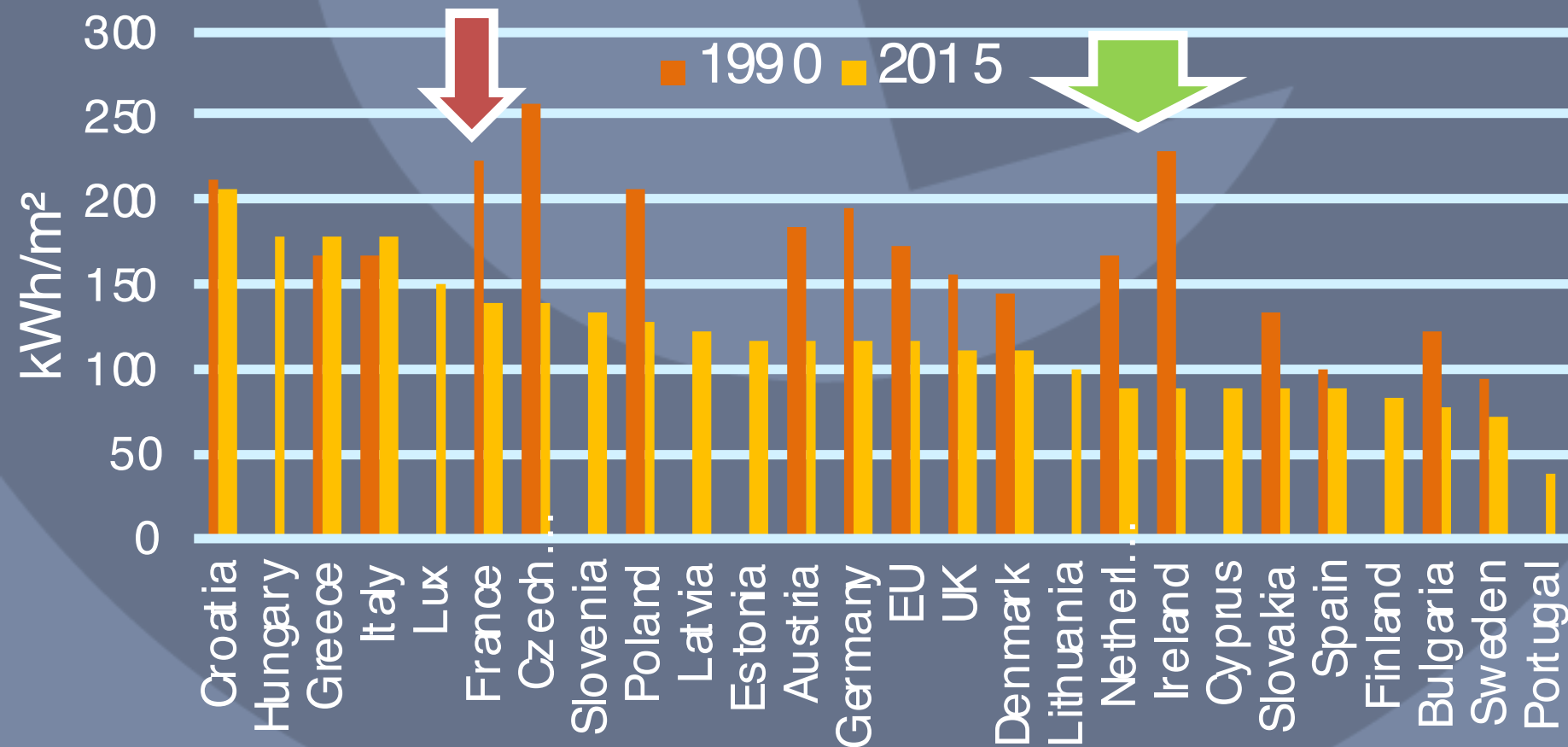
→ to increase the share of renewables in the energy consumption to 32% in 2030

Building sector : 45% of final energy consumption, 60 % of heating consumption, and 27% of GHG

# Low performance level at EU level (focus on residential)



Unit consumption per m<sup>2</sup> for space heating  
scaled to EU average climate



Source: ODYSSEE MURE project

# What are the main success drivers in Ireland and the Netherlands?



## Ireland



- Fuel substitution (e.g. coal/peat to oil/gas)
- High construction rate with tighter regulations in 90's
- Insulation programs

## The Netherlands



- Building codes and very active policy (2.5 million dwellings from 1978 to 1987)
- Large diffusion of condensing boilers
- extensive insulation measures in existing dwellings



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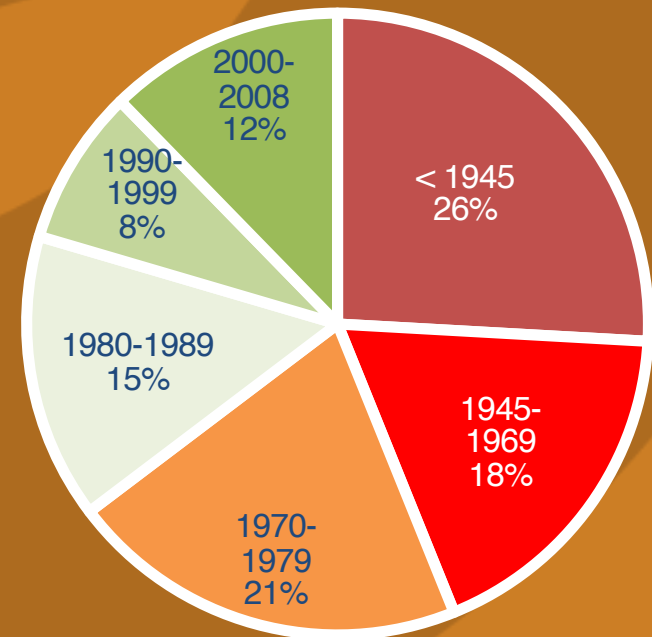
# Why such a discrepancy in France?



- $\frac{3}{4}$  of stock was built without building code (BC)
- 1% of the stock renewed each year (nZEB requirement)
- BC requirement on renovation only since 2005

→ Substantial energy savings will be needed from new and especially existing buildings during the next several decades

Dwellings according to construction date in France



Source: ZEBRA project

# Renovating the French building stock: A national priority (the targets)

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- To reduce the final energy consumption in the building sector by 28% in 2030
- To bring the entire building stock to the nZEB levels by 2050,
- And prior 2025 all private residential buildings >330 kWh/m<sup>2</sup>/yr must have undergone an energy renovation

# Renovating the French building stock: A national priority (the means)

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- **Complete policy package:**
  - ✓ Regulatory: building code, EPC, etc.
  - ✓ Incentive: soft loan, credit tax, white certificate, etc.
  - ✓ Targeted programs dedicated to fight against fuel poverty
  - ✓ Communication: one stop shops
- **The National Plan: 14 bn€ euros over 5 years to promote and accelerate the thermal renovation of buildings (incl 4.8 bn€ targeting public sector buildings).**

# To massify renovation: 500,000 retrofitted buildings/yr

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To vitalize/attract renovation with step-by step approach:  
quick wins with lower financial constraint, but:



-May not be optimal  
and eventually  
involve higher costs

-May lead to more  
discomfort and  
disruptions for  
consumers

→ nZEB compatible



## Successes and challenges

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- individual coaching ;
  - Popular incentives (+fuel poverty target);
  - Training for professionals
- France has one of the highest annual renovation rates (ZEBRA2020)...
- ...still 40% of thermal renovation are light
  - → avoid lock-in effect and incentivise deeper renovation
  - Make renovation more sexy!
  - Barriers : no clear definition & compliance; split incentive dilemma; poor quality of EPC...

# My guess about France positioning in the ACEEE international scoreboard?



France is a good candidate

Made a lot of effort to catch up!!

If France keeps going this way the country will achieve your goals



Thank you for  
your attention!

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# Low performance level at EU level (focus on residential)



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