Imaclim-R: French Acceptable* Scenario
68% CO₂ Reduction by 2050

Residential Sector

- Wood - heating
- Fuel oil - heating
- Gas - heating
- Electricity - heating
- Coal other uses
- Gas other uses

Acceptable measures: tax credits and zero-interest loans for renovation, thermal regulations, obligatory renovation funds, third-party financing, biogas, CO₂ tax and progressive tariff

Evolution between 2010 and 2050:
- + 37% total residential surface (m²)
- – 37% total final energy consumption
- – 50% final energy consumption per capita
- – 75% CO₂ emissions (excluding electricity)

Power Sector

- Coal
- Existing nuclear
- Centralized Solar
- Gas
- EPR
- Gas with CCS
- Wind Offshore
- Biomass
- Hydro power

Acceptable measures: feed-in tariffs, demand-side management, grid reinforcement, nuclear lifetime extension, CO₂ tax and progressive tariff

Evolution between 2010 and 2050:
- – 70% in CO₂ emissions/km for individual cars
- – 66% emissions in passengers transport

Transport Sector

- Shares of car energy efficiency labels (%)
- Shares of car energy efficiency labels (%)

Acceptable measures: urban planning, teleworking, increased vehicle occupation, kerosene tax, heavy truck eco-tax, road investment partly shifted to collective transports, freight decoupling, biofuels, CO₂ tax

Evolution between 2010 and 2050:
- Improved growth (especially in the midterm)
- Reduction of energy bill (2% of GDP in 2050)

Macroeconomic Impact

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Evolution between 2010 and 2050:
- 34% price increase in the long-run
- – 86% CO₂ emissions

Emissions Reductions

- Fossil CO₂ emissions

- Industry
- Manufacture and services
- Residential
- Agriculture
- Electricity

* The scenario was accepted by French stakeholders that participated in the project’s dialogue meetings