Low Carbon Societies Network

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www.lowcarbon-societies.eu
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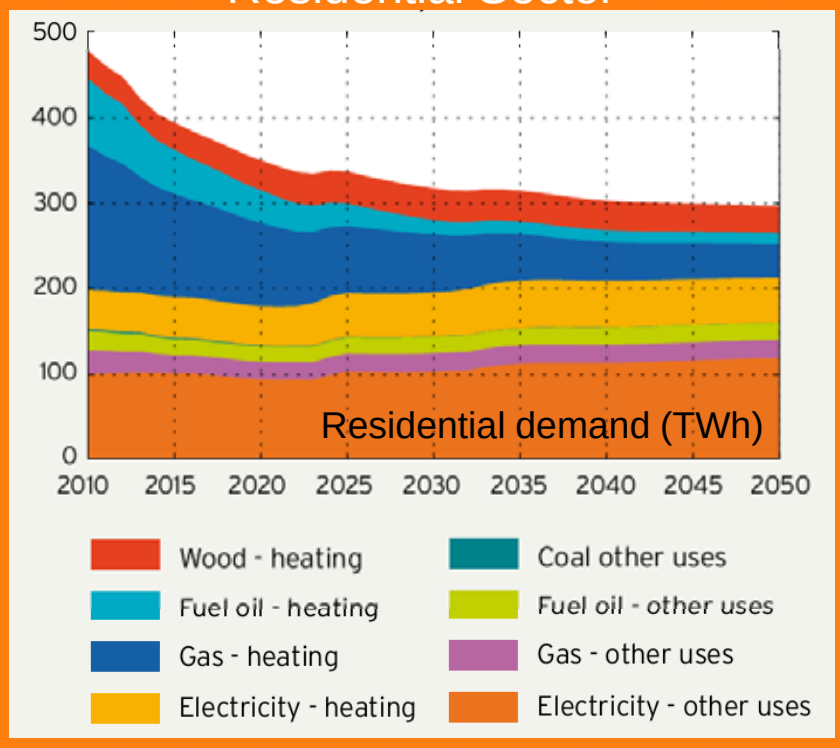
By ENCI-LowCarb Project (2009-12) supported by the EU 7th Framework Program.

Imaclim-R: French Acceptable* Scenario
68% CO_2 Reduction by 2050

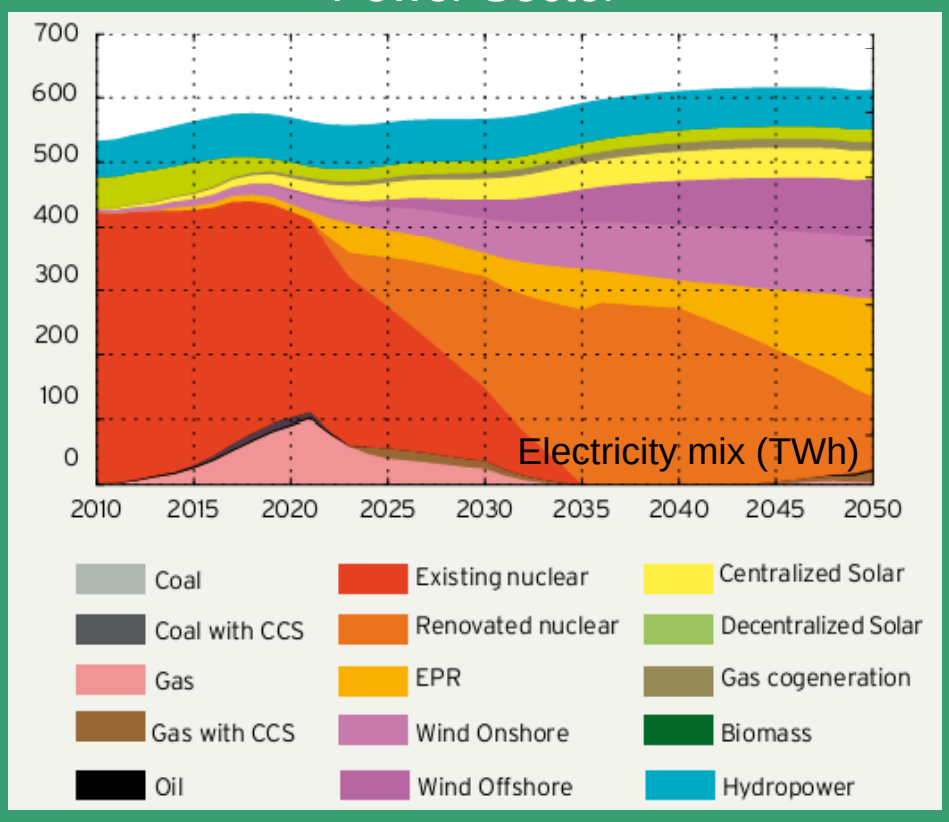
Residential Sector



Acceptable measures: tax credits and zero-interest loans for renovation, thermal regulations, obligatory renovation funds, third-party financing, biogas, $C0_2$ tax and progressive tariff

Evolution between 2010 and 2050:
+ 37% total residential surface (m^2)
– 37% total final energy consumption
– 50% final energy consumption per capita
– 75% CO_2 emissions (excluding electricity)

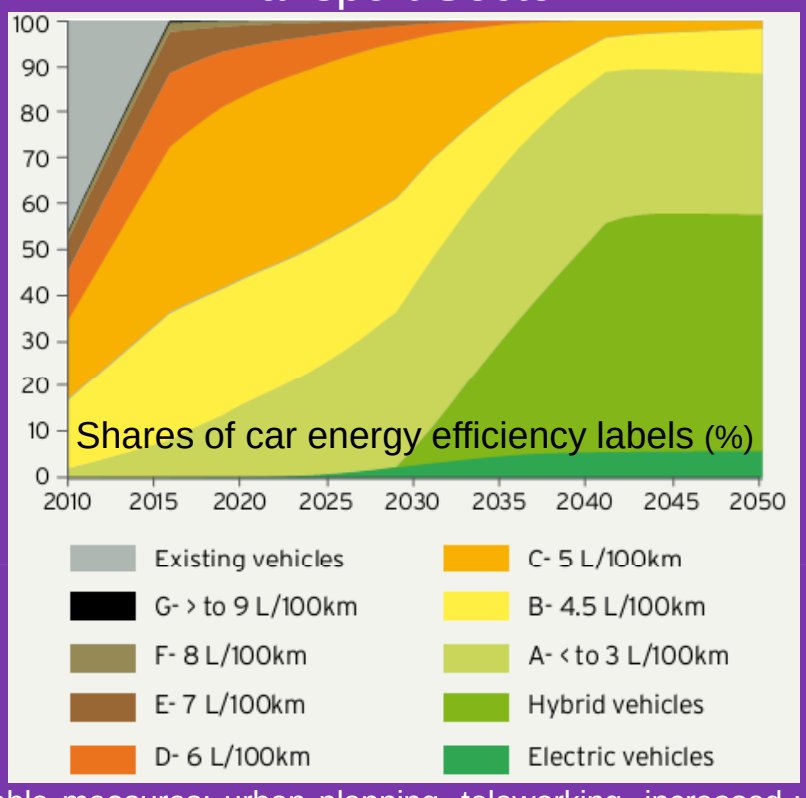
Power Sector



Acceptable measures: feed-in tariffs, demand-side management, grid reinforcement, nuclear lifetime extension, $C0_2$ tax and progressive tariff

Evolution between 2010 and 2050:
34% price increase in the long-run
– 86% CO_2 emissions

Transport Sector



Acceptable measures: urban planning, teleworking, increased vehicle occupation, kerosene tax, heavy truck eco-tax, road investment partly shifted to collective transports, freight decoupling, biofuels, $C0_2$ tax

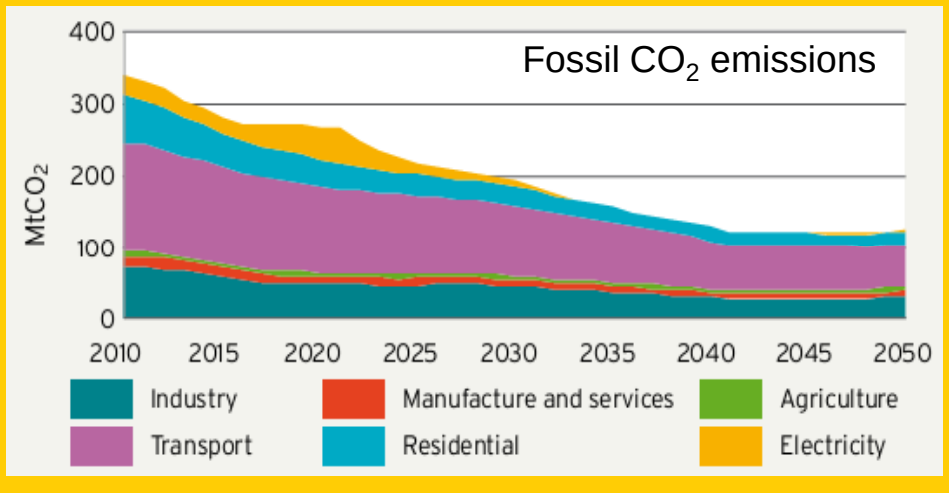
Evolution between 2010 and 2050:
– 70% in CO_2 emissions/km for individual cars
– 66% emissions in passengers transport

Macroeconomic Impact

	2010-2020	2020-2030	2030-2050	2010-2050
Reference	1.19	1.29	1.2	1.22
Mitigation	1.24	1.47	1.11	1.24

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

Emissions Reductions



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

CIRED

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The scenario was made with the model IMACLIM-R developed at the Centre International de Recherche sur l'Environnement et le Développement (France)

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