TRANSITION(S) 2050
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ACT 4 CLIMATE

4 SCENARIOS TO ACHIEVE CARBON NEUTRALITY

SCENARIO 2
REGIONAL COOPERATION

Society is transformed within the framework of shared governance and regional cooperation. Non-governmental organisations, public institutions, the private sector and civil society find pragmatic ways to cooperate to maintain the social fabric.

To achieve carbon neutrality, society relies on a progressive but steady change of the economic system towards a sustainable path combining energy sufficiency and efficiency. Consumption of goods becomes measured and responsible, sharing becomes widespread.

SOCIETY IN 2050...

-50%
reduction in meat consumption

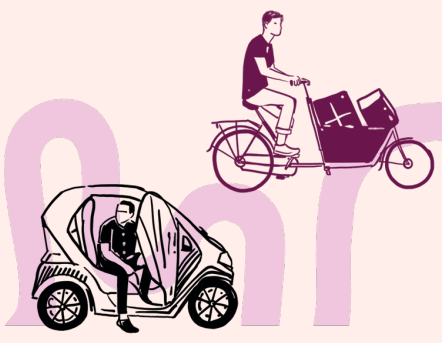
Diversification, renewed regional devolution and rational use of plant and forest resources

- Acceleration of the **food transition**: less indulgent, more plant based.
- Increased use of forestry timber for material uses (buildings).
- Development of **advanced biofuels**.
- Irrigation contained by using favourable agricultural practices.

Massive renovation, gradual but profound changes in lifestyle

- Cities **build upwards** in a controlled manner.
- **Sharing of buildings**, living rooms or appliances becomes widespread.
- Strong acceleration in energy renovation.

79%
of existing housing units in 2015 undergo deep renovation



-17%
fewer miles travelled per person (including international air travel)

Transport sustainability at the heart of the ecological transition

- **Mobility is shifting to a more local approach**, with development of daily trains, cargo bikes, mini-cars and other such measures.
- Freight traffic down due to a reduction in volumes and distances travelled, with the share of rail and waterways more than doubling.

Re-industrialised value chains, specialised by region, driven by the Government

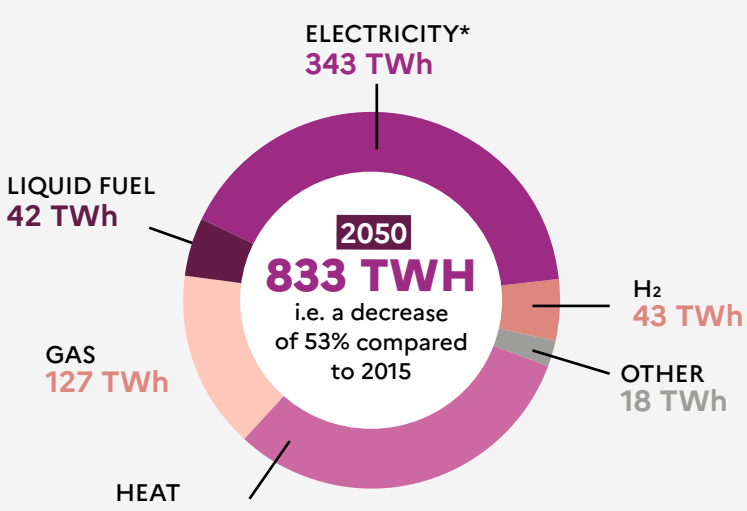
- Public planning supports and finances a low-carbon industrial policy.
- Development of **recycling and recovery**.
- Significant **re-industrialisation effort in targeted sectors**.

-47% and -84%
reductions in energy consumption and GHG emissions respectively in industry

NB: the data shown in this infographic is defined in relation to the year 2015

An energy mix dominated by biomass and essentially decarbonised electricity

Final energy demand by carrier (with non-energy uses and excluding international bunker fuel)



Electricity generation equivalent to that of today

A wide range of direct and indirect uses for **hydrogen**

The sharp drop in **gas** consumption means that the vast majority of demand can be met with decarbonised gas

* Excluding intermediate consumption, mainly for production of H_2

Maintenance of natural wells and limited use of CO_2 capture and storage (CCS)

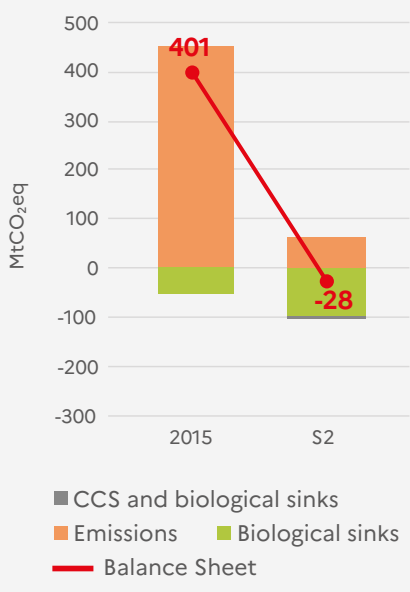
2015 **401** $MtCO_2eq$ → 2050 **-28** $MtCO_2eq$

Carbon storage in soils through **favourable agricultural practices**.

Levels of wood harvesting in forests remain moderate, which **maintains a significant carbon sink in forests**.

CO_2 capture and storage is deployed on some processes where emissions cannot be reduced (cement plants).

Balance of CO_2 emissions and sinks in 2015 and 2050



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