

The revised French Low Carbon Strategy

An ecological and inclusive transition towards carbon neutrality

**French Ministry for an Ecological and
Inclusive Transition**



The French low-carbon strategy

- A first strategy adopted in 2015
- **Roadmap for the French mitigation policy**
- In coherence with the **European targets**
- Sets **long term objectives** and **carbon budgets** for periods of 5 years based on a scenario
- Defines policy **orientations** to achieve the goals
- Revised every 5 years

Where are we today ?

The French leadership in the fight against climate change

- Among the lowest GHG emissions per capita within the EU and the G20
- Reduction by 16% of the national emissions between 1990 and 2016
- A National Low Carbon Strategy in 2015 to divide by 4 our national emissions by 2050

A need for more effective actions

- Slight increase of the GHG emissions since 2014
- Not in line with our national short term goals

Where are we today : An urge for more ambition

The revision of the Strategy

**A willingness to
raise our ambition
2017 Climate Plan**

A legal obligation

A collective approach

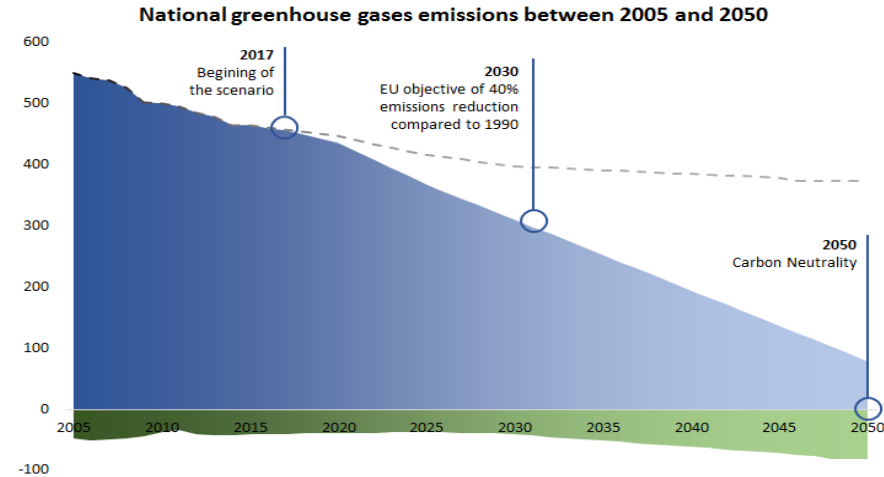
- Early public consultation : more than 13 000 responses
- Involvement of a variety of stakeholders (civil society, private sector, ministries) to elaborate the scenario and the orientations
- Public consultations on the draft strategy in 2019

Where do we want to go ?

Carbon Neutrality in 2050



- **An ambitious yet reachable goal** (urge for concrete and strong measures but strategy developed on a realistic scenario)
- **A necessary step to respect the Paris Agreement commitments**
- A **desirable future** : opportunity for economic development (more GDP and jobs according to the economic evaluation of the Strategy), other important co-benefits (climate consequences, air pollution, biodiversity...)



Where do we want to go ?

What does carbon neutrality mean ?



A balance between anthropogenic emissions by sources and removals by sinks of greenhouse gases

A strong decrease in energy consumption

- Energy temperance
- Energy efficiency

A complete decarbonization of energy production by 2050

- Biomass
- Renewable heat from the environment
- Decarbonized electricity production

A limitation of non-energy related emissions

- Agriculture
- Industrial Processes

An increase of the carbon sink

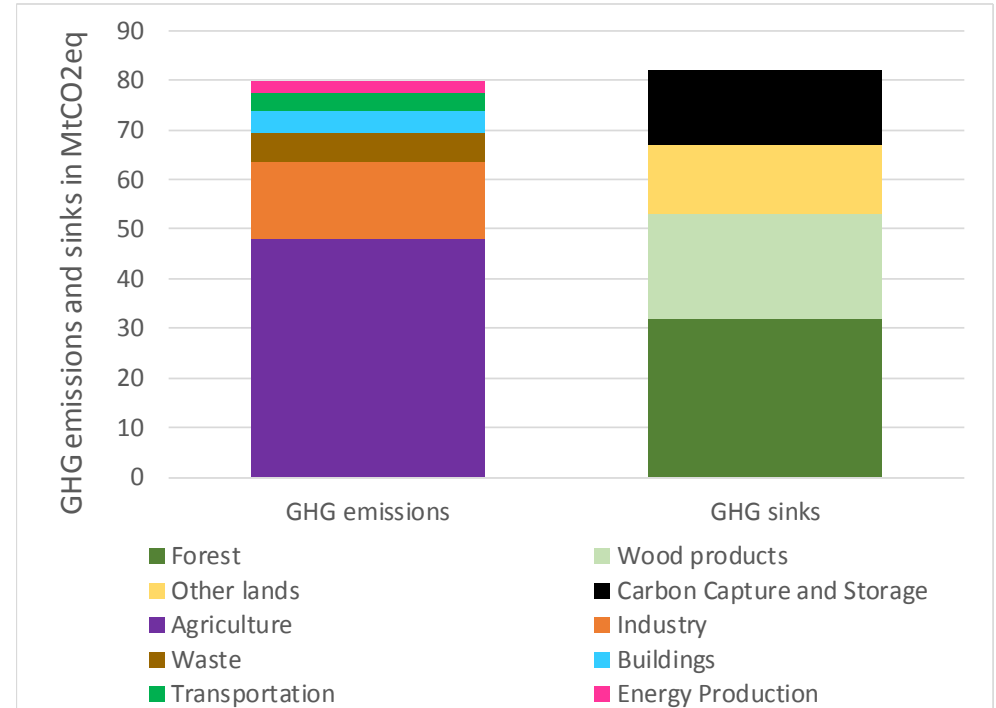
- Forest management
- Wood products
- Land
- CCS

How do we get there ?

Lessons learned from the scenario

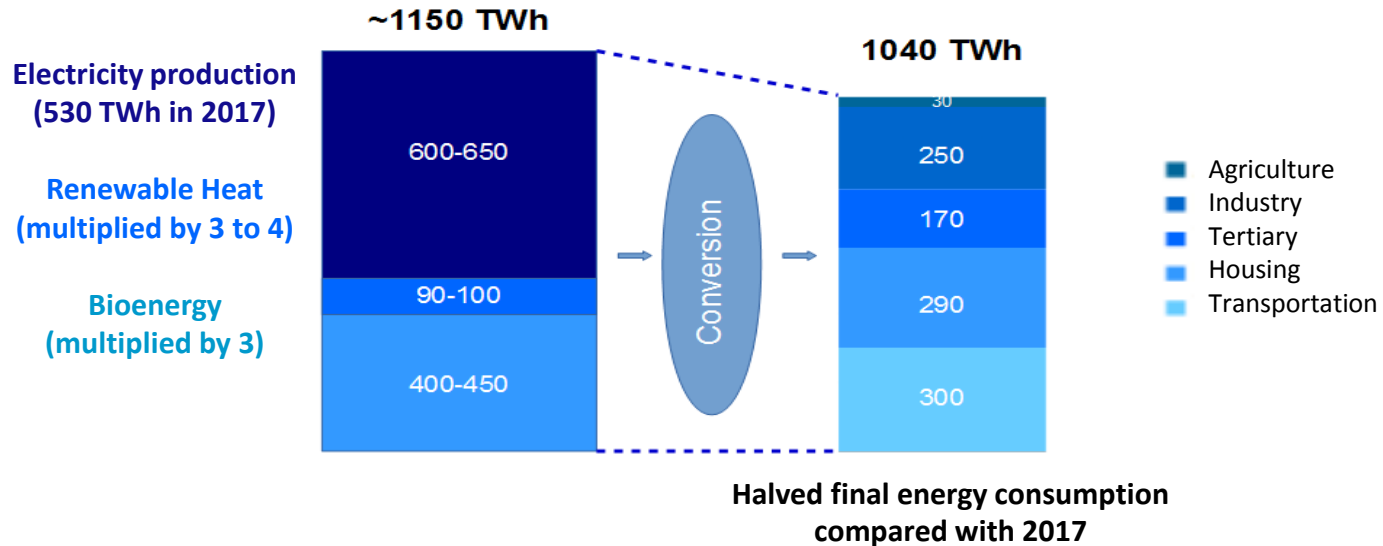
- The **carbon sink** can only balance residual / remaining emissions.
- Almost no **energy related emissions**
- Residual emissions mainly coming from **agriculture** (divided by 2 between 1990 and 2050), **industrial processes and waste**
- A **strong increase in wood use** to store carbon

Reasonable use of CCS



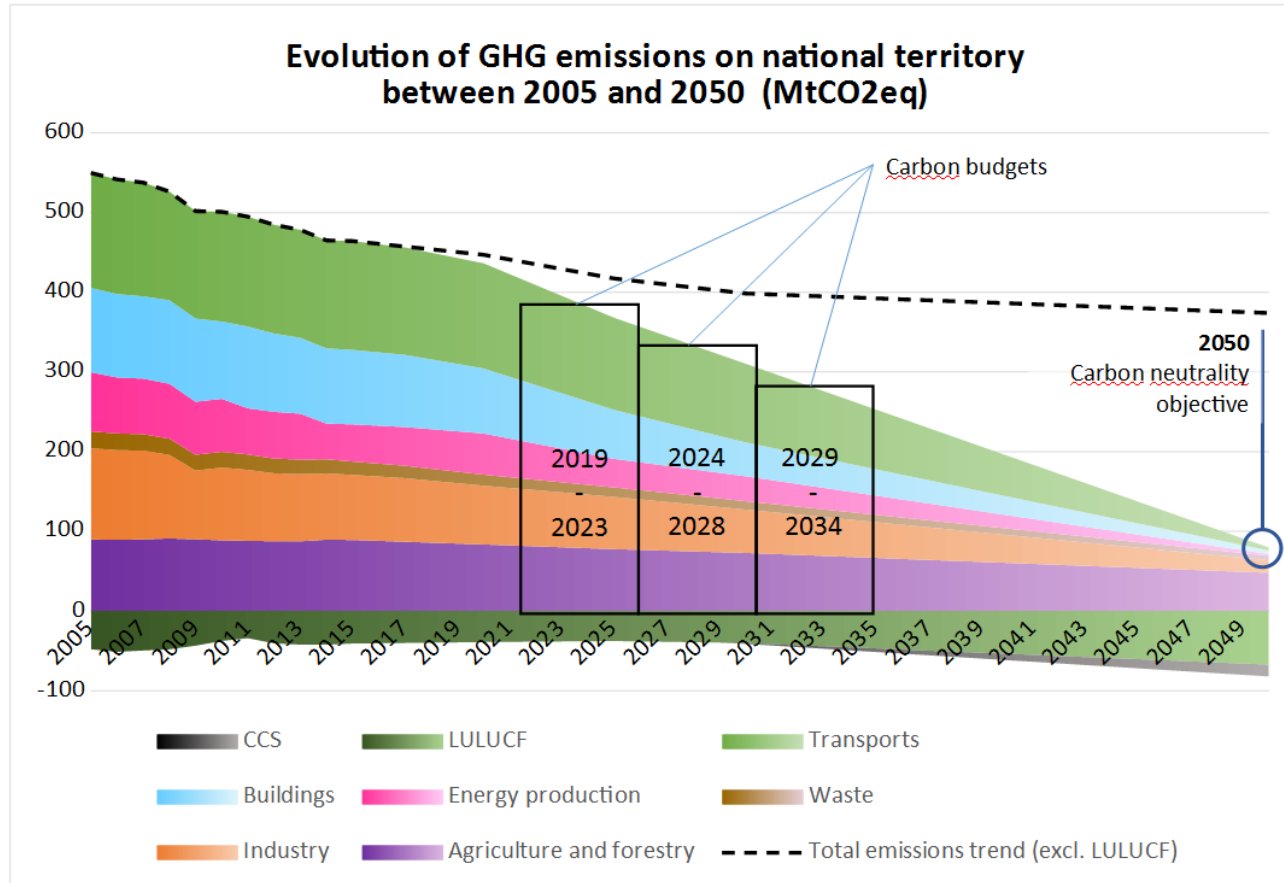
How do we get there ? Lessons learned from the scenario

- Strong efforts to **reduce energy consumption** (divided by two in 2050 compared with 2017)
- **Critical management of biomass**, of which resources will be limited. Oriented towards uses with high value added and with low substitution possibilities.
- Decarbonization implies an **electrification** of energy consumption



The next carbon budgets

- The Strategy defines the **next 3 carbon budgets**
- The next three carbon budgets are aligned on the **carbon neutral scenario**
- **Detailed by sectors** to focus the efforts



How do we get there ? What should we do ?



Transforming all sectors : some examples

- All sectors are mobilized to their full potential

- Decarbonizing mobility



- Limit the increase of passenger and goods traffic (modal shift, car sharing, coworking)
- Electrify passenger cars (100 % electric fleet by 2050)
- Base goods transportation on new technologies (gas, electricity, hydrogen, biofuels...)
- Insist on vehicle performances

- Promoting low-carbon practices in agriculture



- Support the development of new technologies and practices (agro-ecology, precision farming, organic farming...) in order to decrease use of nitrogen-based fertilizers and reinforce soil carbon absorption
- Develop energy and material production to feed the growing bio-economy
- Change consumption habits by reducing wastage and respecting public health recommendations leading to diet alterations



MINISTÈRE
DE LA TRANSITION
ÉCOLOGIQUE
ET SOLIDAIRE

Evolution of GHG emissions (2015 baseline)	
2030	2050
-31 %	Complete Decarbonization

Evolution of GHG emissions (2015 baseline)	
2030	2050
-20 %	-46 %

Transforming all sectors

- All sectors are mobilized to their full potential

- 100 % low-energy buildings by 2050

- Massively retrofit public and private building stocks
Use a balanced heating mix based on heat pumps, heating networks and to a lesser extent biomass and biogas
Insist on equipment energy efficiency and life cycle material impact
Develop sobriety



- Maximizing the carbon sink and developing bioeconomy

- Develop the use of natural products, e.g. wood, for materials and products with high added value and long lifetime, develop forestry and adapt forests to climate change, taking biodiversity into account
Stop net artificialisation



Evolution of GHG emissions (2015 baseline)	
2030	2050
-53 %	Complete Decarbonization

Evolution of GHG emissions (2015 baseline)
2050
+50 % absorption

Transforming all sectors

- All sectors are mobilized to their full potential



- Developing low-carbon industries**
- Energy efficiency of branches and decarbonization of energy (biomass, biogas, electricity)
Enhancing eco-design and circular economy



- Developing low-carbon energy sources**
- High mobilization of biomass
Development of electric renewable energies



- Preventing and maximizing the value of waste**
- Reduce waste production and enhance (bio)waste recovery
Respect waste treatment hierarchy

Evolution of GHG emissions (2015 baseline)	
2030	2050
-35 %	-81%

Evolution of GHG emissions (2015 baseline)	
2030	2050
-36 %	Complete Decarbonization

Evolution of GHG emissions (2015 baseline)	
2030	2050
-38 %	-66%

Raising ambition

- With the revised Low-Carbon Strategy, France raises its ambition towards **carbon neutrality by 2050**
- A **growing number of countries** commit to similar objectives worldwide
- France **encourages the EU** to adopt similarly ambitious objectives and supports the Commission's proposal to reach net zero emissions in 2050 at EU level