

French Energy Transition towards Green Growth

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France made 3 major environmental impetus during the last 10 years

- **National debate on energies =>“POPE” Steering Law of 13 July 2005**

Cut of GHG emissions of 3% per year from now up to 2050 and support to “Factor 4” at World level – Decrease of the final energy intensity of 2% per year from 2015 and 2.5% per year from 2030

- **“Grenelle de l’environnement” Initiative in 2007-2010 =>“Grenelle 1” Steering Law of 3/08/2009**

Ambitious targets for buildings (50 kWh/m²/year for new buildings, - 38% energy cons. for existing buildings, energy audits of State buildings,...) and transportation

Application of « Factor 4 » and of the EU “3 x 20%” – “Grenelle 2” Act #2010-788 of 12/7/2010 to implement “Grenelle 1” – Yearly Finance Law: CIDD, Eco-PTZ+, bonus-malus, etc. – Energy R&D: PIA, Competitiveness poles,...

- **Energy Transition towards Green Growth** - On-going process since 2012 – National Debate on Energy Transition - from Nov. 2012 to July 2013 –

- Environmental Conference of Sept. 2013 with President Hollande declaration – Energy Transition towards Green Growth Act (LTECV)

17 August 2015 – Finance laws for 2015 and 2016

Main preoccupations of the French energy policy

Article L.100-1 of the Energy Code (art. 1, LTECV)

- 1° Sustain a competitive economy with many jobs
- 2° Ensure security of supply and reduce dependence on energy imports
- 3° Maintain a competitive and internationally attractive energy price that allows to keep under control consumer energy bills
- 4° Preserve human health and the environment
- 5° Guarantee social and territorial cohesion with a right for all families to access energy at a cost that is compatible with their revenues
- 6° Fight against energy poverty
- 7° Contribute to the setting up of an European Energy Union

In the road to Paris COP21, LTECV reflected French ambition in the framework of the climate international negotiations

Toward a low carbon society

Minister Ségolène Royal's at the French Ministers Council of 30 July 2014:

- **To better consume together with energy savings** : less fossil fuels, less transport, more thermal comfort, more energy efficiency (especially in the industry sector)
- **To produce in a new way, preserving environment** : more local resources, more renewable energies, less waste
- **To help society go further through mobilizing projects** : cooperative projects for energy production and innovative services
- **To create new/sustainable jobs**, especially in the building sector › in the next 3 years,

=>Energy Transition should create 100 000 new jobs per year in France

Structure of the Energy Transition towards Green Growth Act

(LTECV Act, 17
August 2015)

Title I st – To define common objectives in order to make Energy Transition a success, to increase French energy independence and to fight against climate change

- Title II – To **improve buildings refurbishment** in order to save energy, cut energy bills and create jobs
- Title III – To **develop clean transports** in order to improve air quality and to protect health
- Title IV – To **fight against waste** and to promote **circular economy**: from product conception up to recycling
- Title V – To **promote renewables** in order to diversify our energy mix and to promote territorial resources
- Title VI – To **strengthen nuclear safety** and **citizen information**

Title VII – To simplify and to clarify administrative procedures in order to improve efficiency and competitiveness

Title VIII – To empower citizens, companies and territories so that they can act together

Most emblematic targets of the LTECV



40% less greenhouse gas emissions in 2030 compared to 1990



30% less fossil fuel consumption in 2030 compared to 2012



Increase the share of renewable energy sources to **32%** of the final energy consumption in 2030 and **40%** of the electricity production



Reduce final energy consumption by **50% in 2050** compared to 2012



-50% less waste in landfill by 2025



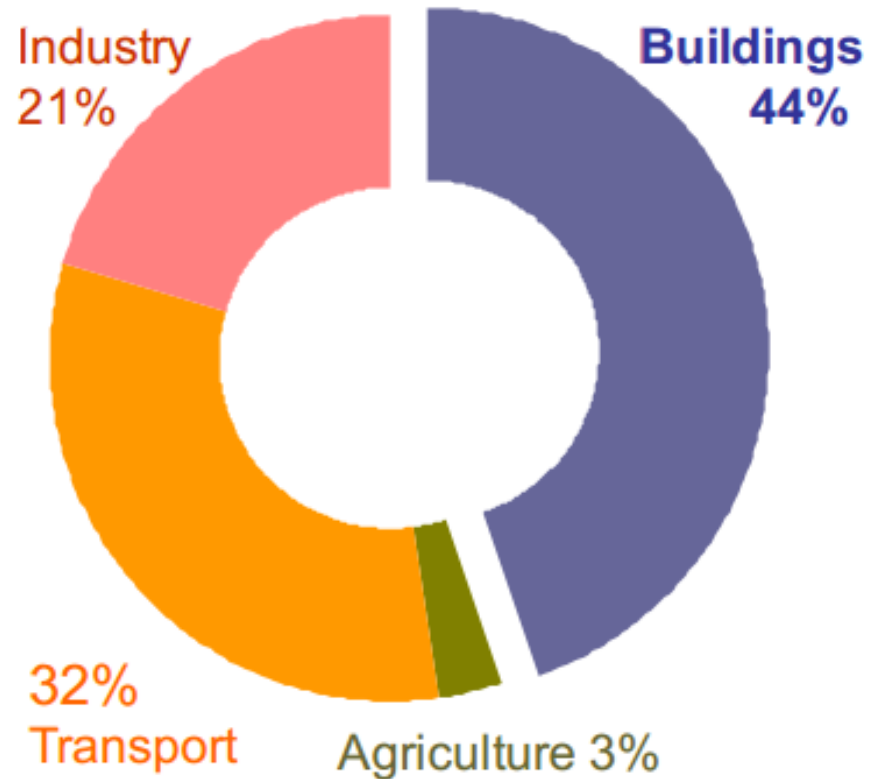
Diversify electricity production and reduce the share of nuclear power to **50%** by 2025

More detailed targets of LTECV

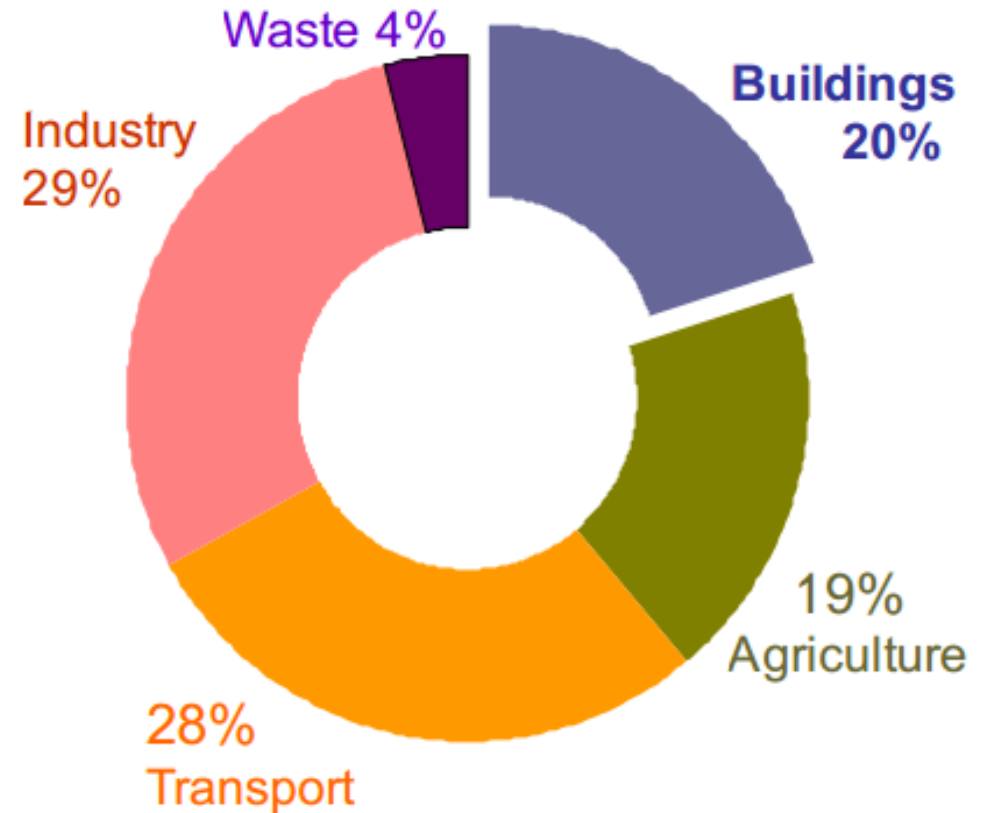
- Cut **GHG emissions** of 40% between 1990 and 2030 ; to divide by 4 GHG emissions between 1990 and 2050
- Cut **final energy consumption** of 20% by 2030 and 50% by 2050 compared to 2012 ; to reach 2.5% for the annual fall rate of the final energy intensity by 2030
- Cut consumption of **fossil fuels** of 30% by 2030 compared to 2012
- Raise the share of **renewables** within the gross final energy consumption to 23% by 2020 and to 32% by 2030 ; Reach at least 10% by 2020 for renewables within the final energy consumption of the transport sector
- Reach 50% for the share of **nuclear** in the French power generation by 2025 (compared to 78% today) ; limit the authorized total capacity of nuclear power generation to 63.2 GW maximum
- Install by 2030 at least 7 million charging points for electric and hybrid vehicles
- Cut **municipal waste production** per capita of 10% over 2010-2020 and to stabilize volumes of waste coming from economic activities
- Decouple **raw materials consumption and GDP** (-30% in 2030), etc.

Main objectives for buildings

Final energy consumption in 2013



GHG emissions in 2013

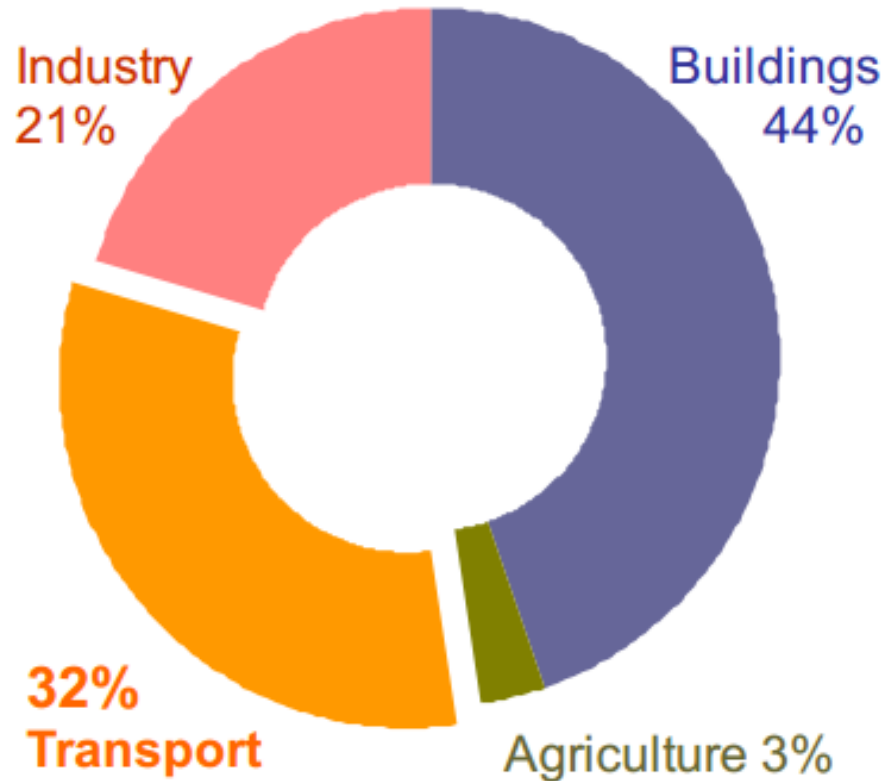


Speed up the energy renovation of housing : target of **500 000 major renovations per year** with **priority to address fuel poverty**

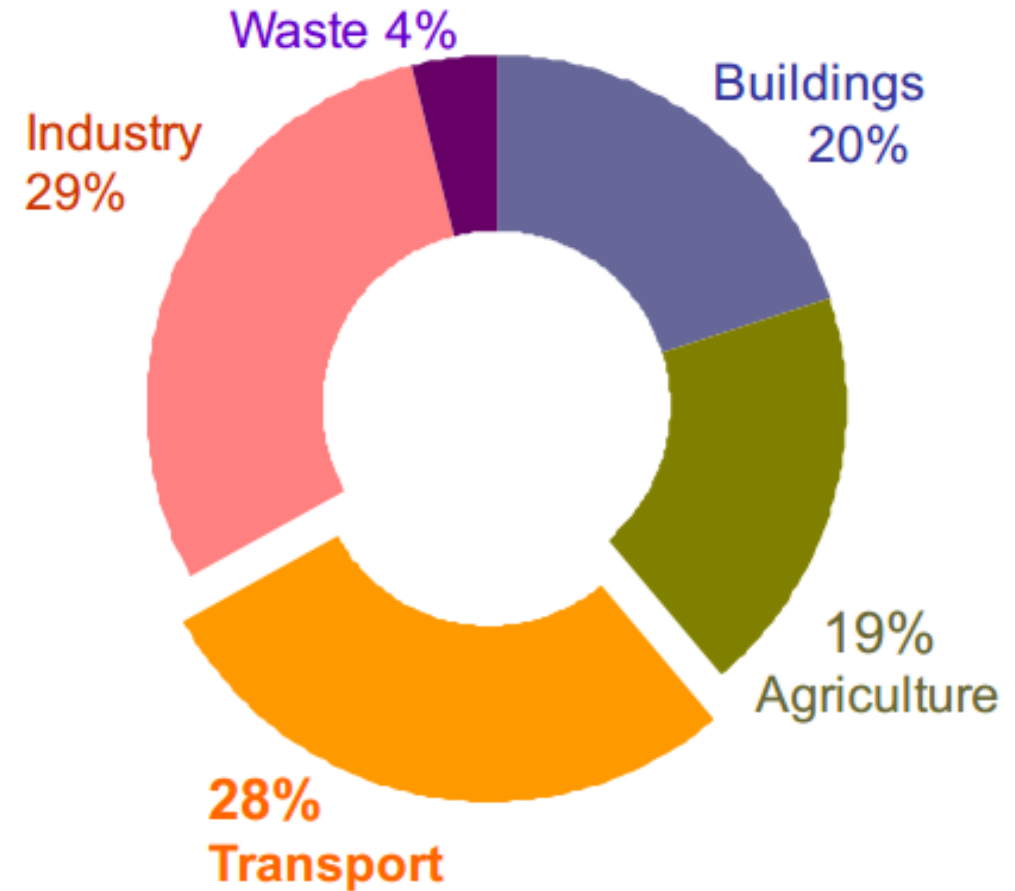
Improve the energy performance of new buildings : all buildings shall be built according to the “low energy building” standard by 2050

Main objectives for transports

Final energy consumption in 2013



GHG emissions in 2013



Step up efforts to limit air pollution

Speed up the replacement of car, lorry, coach and bus fleets with low-emission vehicles

Supply 7 millions charging points for electric vehicles by 2030

Some
outstanding
clauses of
LTECV (1)

Energy transition governance

National Strategy for low-carbon development (NSLC) 2015-2028

NSLC will be set up for 3 successive 5-years periods :

It will impose GHG emissions ceilings (carbon budgets) that France should not exceed;

Future national policies for transport, spatial and infrastructure planning and energy production should take it into account

Pluri-annual Program for Energy (PPE) 2016-2023

It defines priorities to support various forms of energy or energy savings, in line with the NSLC : Energy efficiency and renewables, Security of supply, Balance between supply and demand

Such a PPE will be set up for 2 successive 5-years periods

Some outstanding clauses of LTECV (2)

› Buildings (Title 2)

- Mandatory refurbishment with embedded work
- Mayors can grant exemptions from urban planning rules
- White certificates to fight energy poverty

› Transport (Title 3)

- French State and its public bodies must have > 50% of their fleet with low carbon vehicles
- Traffic restriction measures can be implemented in areas affected by poor air quality

› Circular economy (Title 4)

- Prohibition of disposable plastic bags

› Renewables (Title 5)

- New support system (market + premium)

Example of measures to accompany the LTECV

- Support to thermal refurbishment of buildings: Promotion of **third party financing** to allow advance payment of refurbishment works

Active involvement of local authorities

Partnership between State and Regions to implement the energy transition (2014-2020)

- New **long term loans for energy transition** and green growth from CDC to help local authorities: **€5 billion** fund
 - Special fund for Energy Transition with **€1.5 billion** to support exemplary local initiatives, such as :
 - › Call for initiatives 200 “Positive-energy areas for green growth” (TEPCV)
 - › Call for projects “Zero waste territories”
 - › Call for tenders to install 1,500 biogas plants in rural areas
 - support of research and innovation, professional training
- Etc.

Economic
tools to
enhance the
energy
transition

Carbon tax trajectory:

22€/tCO₂ in 2016, 30.5 € in 2017, 39 € in 2018, 47.5 € in 2019, 56 € in 2020, 100 € in 2030

“Eco-PTZ” : interest-free eco-loan, up to 30,000€, for energy-related renovation work

tax credit for energy-related renovation work (insulation efficient heating, renewables) simplified and increased to 30% of the total expenses

Car conversion bonus for electric vehicles + aids for installation of charging points

Progressive reduction of the diesel/gasoline taxation gap

FOR MORE DETAILS :

DGEC 2015 Report “Panorama énergies–climat” (French and English versions)

<http://www.developpement-durable.gouv.fr/Sortie-du-rapport-Panorama.html>

MEDDE (Ministry of Ecology, SD & Energy) Website :

<http://www.developpement-durable.gouv.fr/-La-transition-energetique-pour-la-.html>

Thank you
for your attention!

