

Objectives and funding of the energy transition in France

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The Energy Transition law for Green Growth (LTECV, 2015)

- **Defines precise objectives for 2030-2050**

	2020	2025	2030	2050
GHG emission (reference 1990)			-40%	/4
Final Energy Consumption (reference 2012)			-20%	-50%
Primary fossil fuel consumption (reference 2012)			-30%	
Share of renewables in gross final energy consumption	23%		32%	
Share of renewables in heat consumption			38%	
Share of renewables in fuel consumption			15%	
Share of renewables in final gas consumption			10%	
Share of renewables in electricity production			40%	
Share of nuclear power in electricity production		50%		
Renewable Heat (and cold) delivered by district heating network			X5	

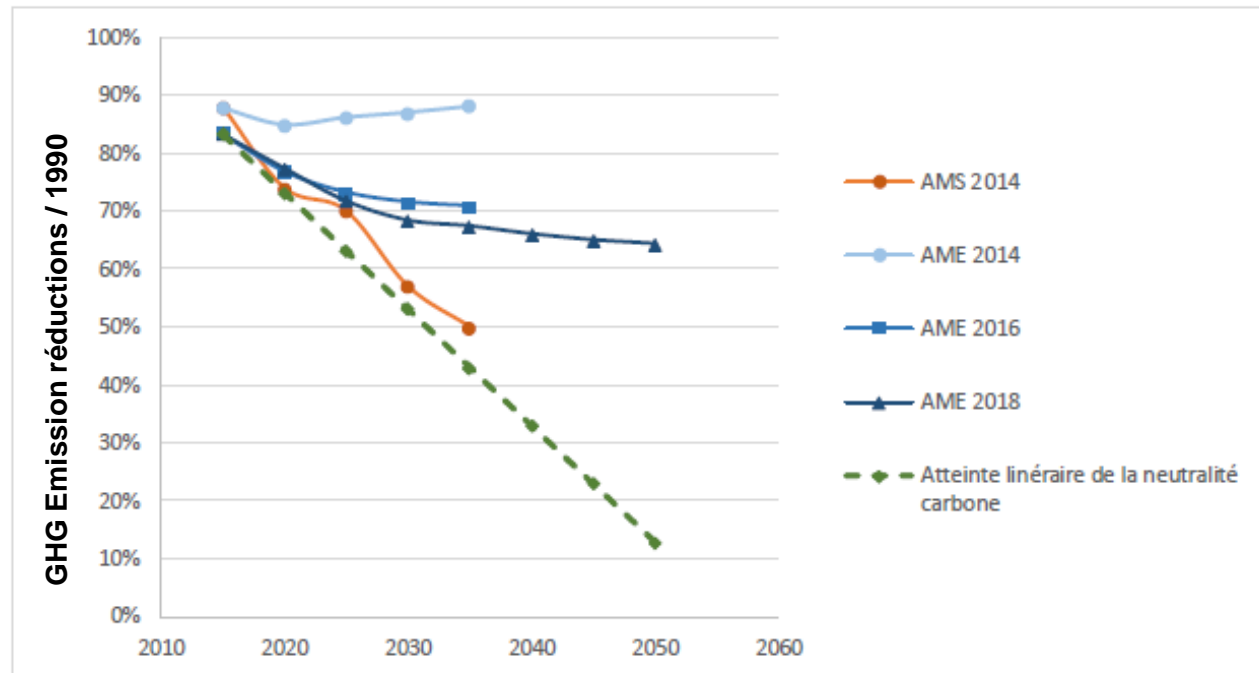
- **Creates a new planning tool for energy production (PPE)**
 - First PPE adopted in October 2016, dealing with 2018 and 2023
 - Ongoing discussions for new PPE dealing with 2023-2028

2018: 2 ongoing prospective exercises

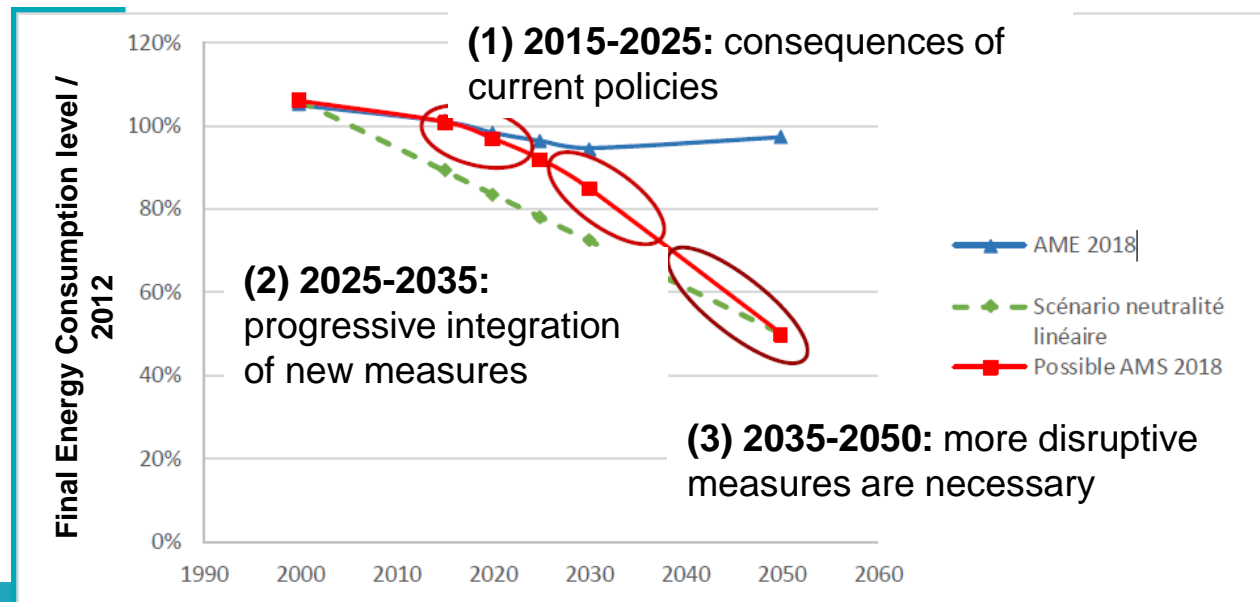
- **SNBC: Low Carbon National Strategy (demand and GHG side)**
 - Define carbon budget by sectors
 - 2050 horizon
 - In order to achieve :
 - Energy consumption / 2
 - Carbon neutrality in compliance with Paris Agreement
- **PPE: Pluri-annual Energy Planning (Production side)**
 - Define energy targets by technologies
 - 2023 and 2028 horizon
 - In order to achieve:
 - 2030 targets

SNBC: Carbon neutrality is really ambitious

- CO2 emission trajectory



- Energy consumption



Energy efficiency Investments

- **23 Mds€ / year between 2015 and 2035**

- 18 Mds€ for building sector

62% for households, 20% for businesses

- 9Mds € for building refurbishment and heating system
- 5Mds € for tertiary sector
- 3.6 Mds€ for new buildings
- 3 Mds€ for transportation sectors
- 2Mds€ for industry

- **Main policies :**

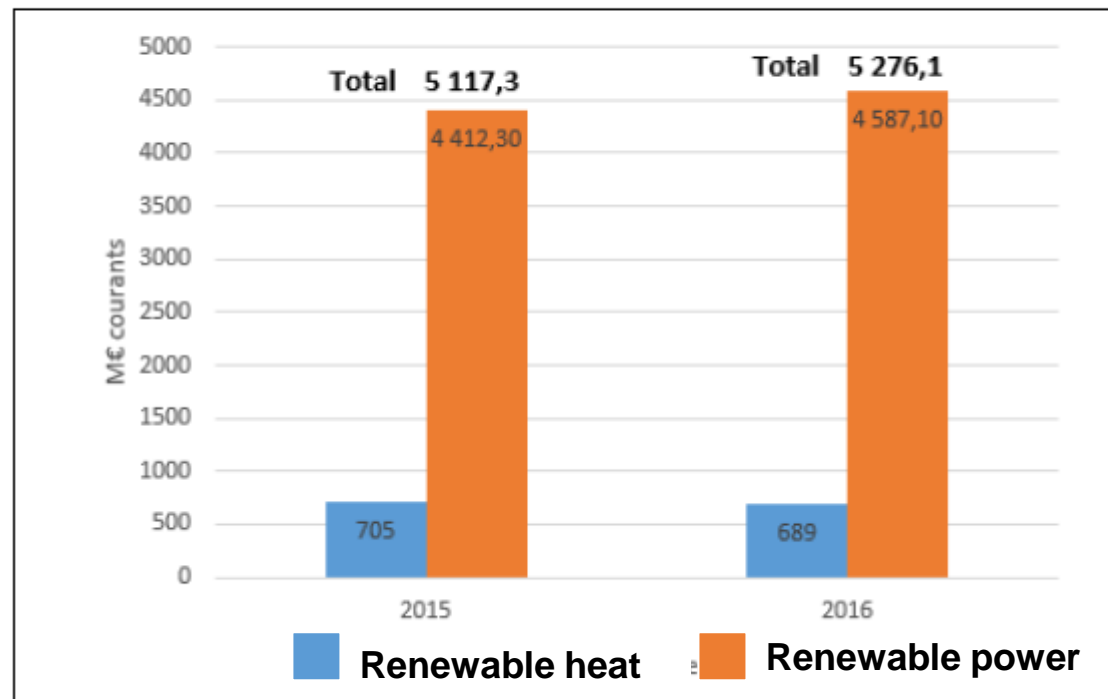
- **Energy Saving Certificates**
- **Tax credit**

CUMAC TWh	2016-2017	2018-2020
Total obligations	850	1600
for precarious households	150	400

Energy Production

- Public support: mainly on electricity

Estimated amount of public support for renewable heat and power



Source: Cour des Comptes , 2018

- Main policies: indirect carbon tax (83€/tCO₂ in 2023)
 - For electricity and biogas: FIT → market premium
 - For heat: Tax credit + Heat Fund + VAT discount

Electricity production

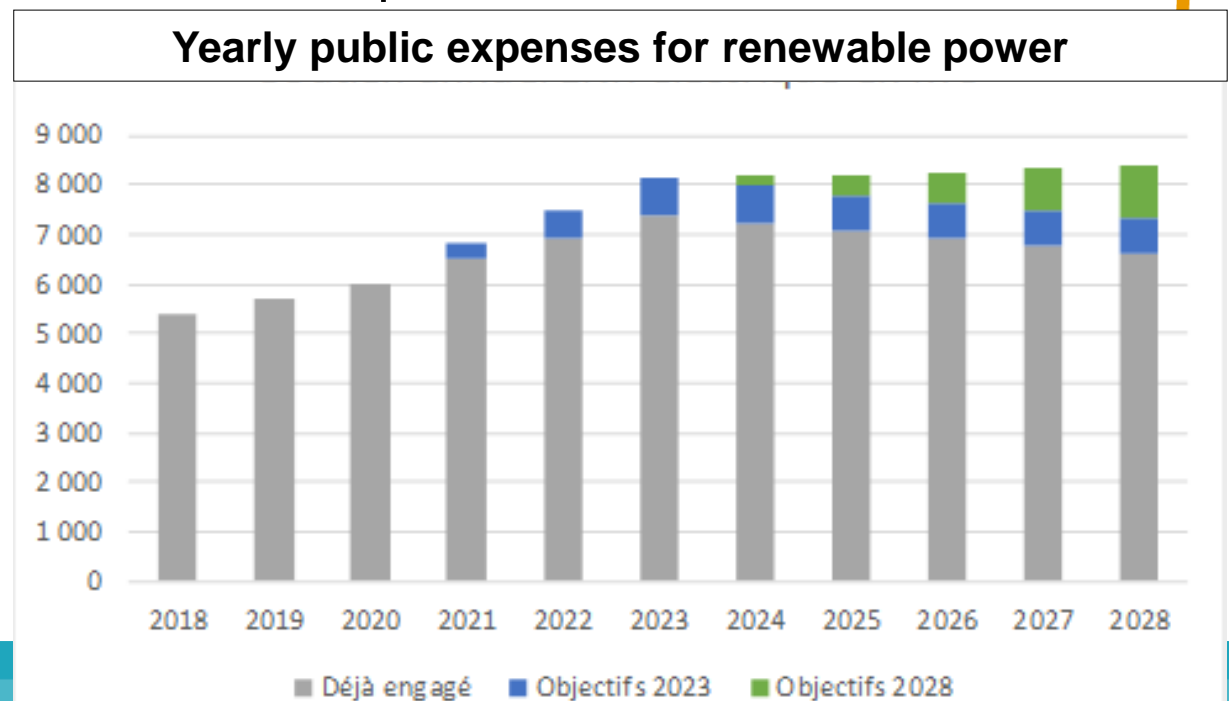
- How-much?

1. Important need of public support for renewable:

- Passed FIT contracts represents 120€B from 2017
- Between 5 and 32 €B of new investments
- Public support depends on electricity market price evolution

2. ccgt: objective no more

3. Nuclear power: life extension depends on ASN decisions awaited in 2020



Other renewable

- **How-much?**
 1. **Ambition to boost renewable heat development**
 2. **Less intensive in direct public support**
 3. **Heat fund should be increased**

Investment need for electricity grid development for 2017-2020 (source TURPE)

- **For electricity transport: 1 496 M€/an**

- **For electricity distribution : 5 036 M€/an**
 - = 856 M€/an : Linky Project
 - + 1521M€/an : connection et reinforcement

 - + 1925M€/an : grid retrofit

Thank you for your attention

