

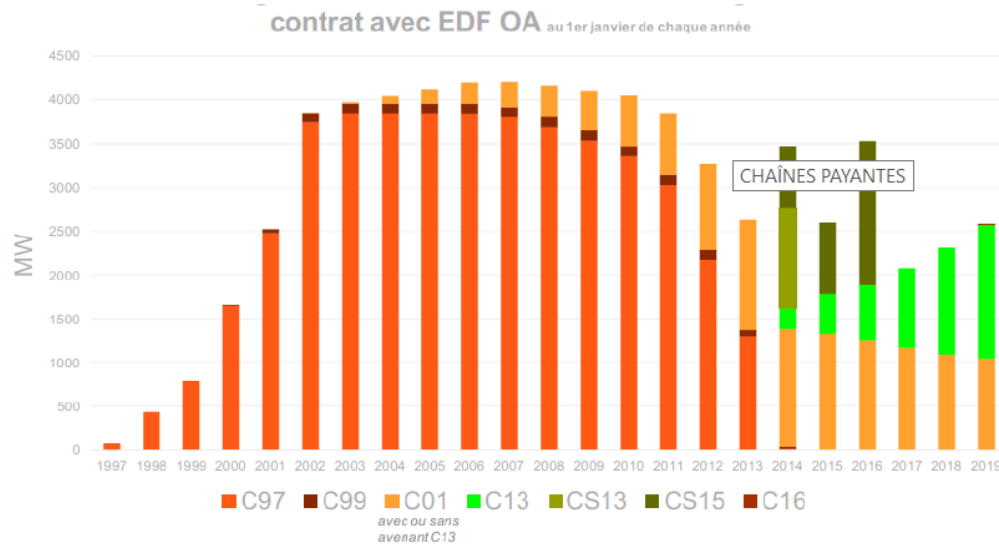
# Market perspective for CHP in France

Cogen Europe Annual conference 25/10/2019

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# A rather difficult context for CHP in France...

A development that occurred throughout the succession of various feed-in tariffs



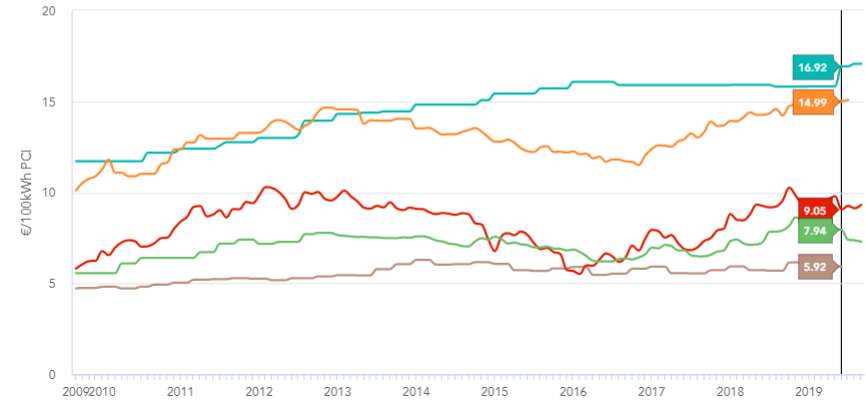
Source : EDF

- But since 2016, no more national incentive for CHP > 1 MWe
- mechanism for smaller units is also threatened -> rebound effect noticed in 2018 in anticipation of this
- A thermal regulation for new built that doesn't value well the CHP energy efficiency

⇒ Fossil fuel based CHP not promoted in a global decarbonisation context

Gaz naturel
Electricité
Fioul domes...
Propane
Bois granules

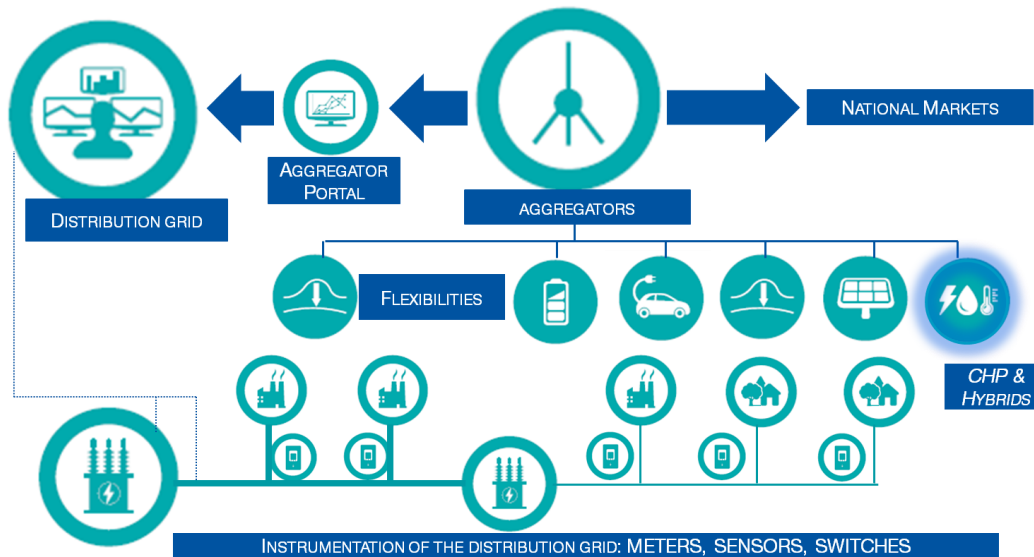
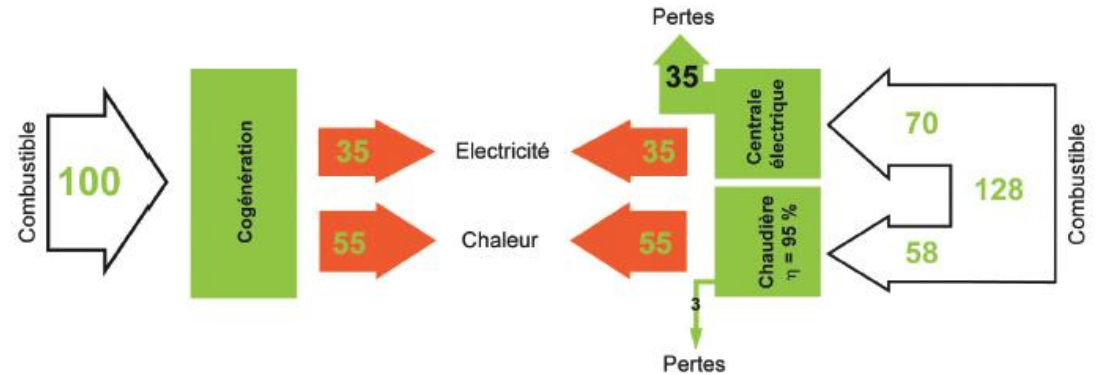
3 ans
5 ans
10 ans
Tout afficher



France has the lowest spark spread of Europe

# Yet this solution remains very interesting for the energy system

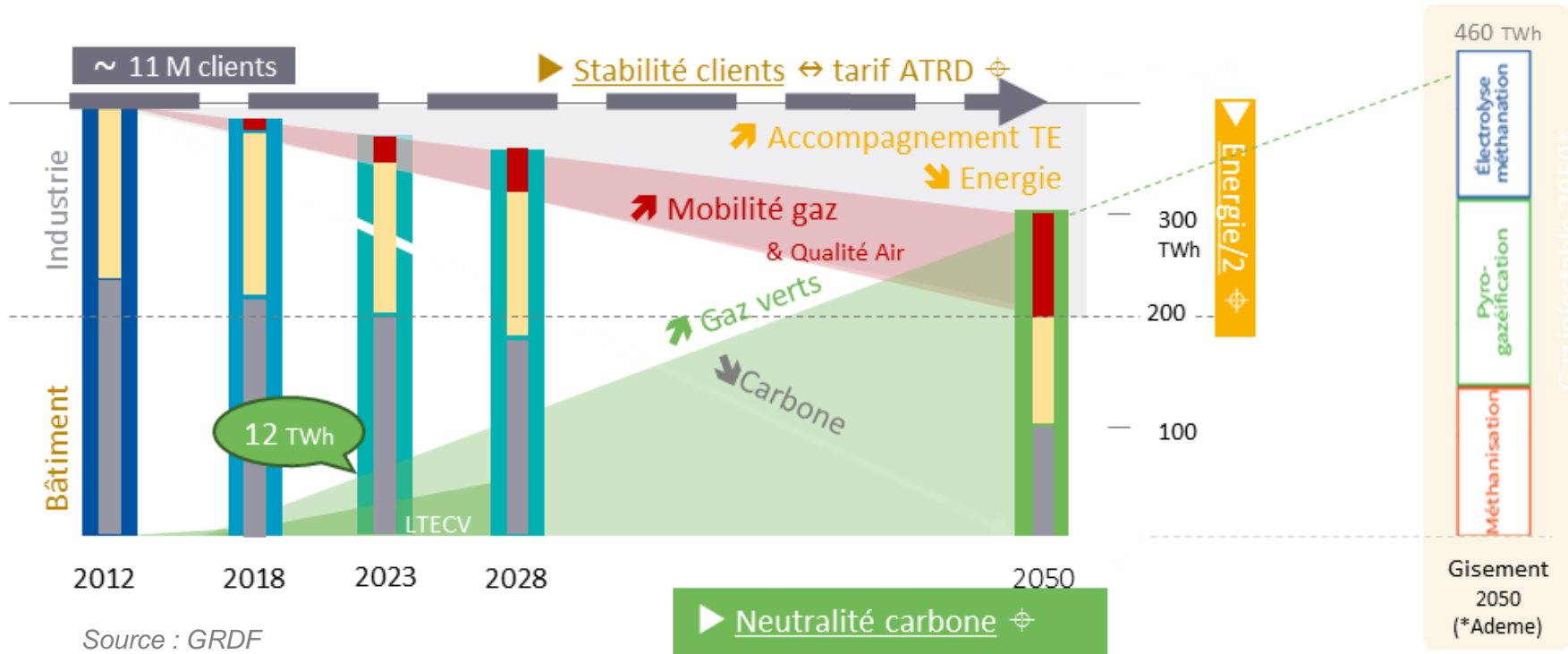
- Energy efficiency and rational use of energy
- Contribution to carbon emission reduction compared to current system



- Flexibility to improve local power distribution issues -> ex Interflex Project in Nice Smart Valley
- Besides, on the long run, it could burn renewable gas...

Source : Interflex project

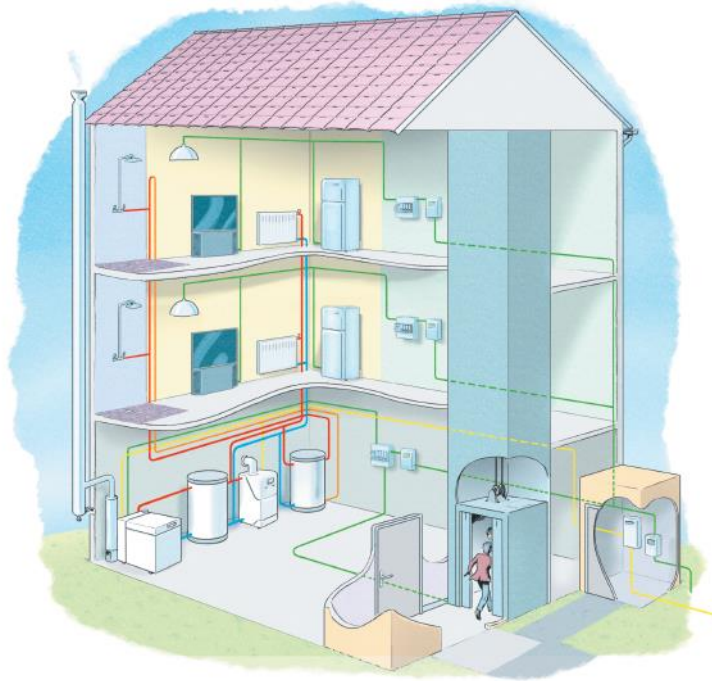
# GRDF view on green gas penetration potential



- ⇒ Combined with efficient and cost effective utilisation technologies such as CHP, this approach can bring significant contribution to the energy transition in France
- ⇒ But due to the context in France, we need to find innovative ways to propose CHP solutions on the short run

## Promising new paths for CHP in France

- The integration of F-cell technology in the thermal regulation for new built
- A law in 2017 allowing collective self-consumption of electricity for a building or a group of building -> game changer with a promise of higher rate of self-consumption and auto-production



Source : CEGIBAT

### Collective Self Consumption

- Avoid consuming electricity 160€ / MWh (all year)
  - Self consumption within flats and common uses (and even nearby buildings)
  - Less need from public support
- ⇒ 16 sites in operation in France and more than 100 projected (mostly PV)

## Besides, technology is developed but still needs to evolve



F-Cell based  
Cogeneration  
system



Engine based  
CHP unit



Micro-turbines



ORC/RC

- ⇒ A good variety of technology with various technical characteristics and maturity levels
- ⇒ The objective is to find a good trade off between investment costs / efficiency / maintenance -  
> an interest towards more low tech solutions with low maintenance costs

GRDF will keep supporting manufacturers / thermal consultants / installers and project holders and decision makers in order to give to gas cogeneration its right place in the energy transition

Thank you for your attention !