

# Whole-life carbon regulation in practice: the French model

Kick-off meeting on bringing down the embodied carbon of the EU building stock

*Tuesday, February 8th 2022*

# RE2020 objectives



- RE2020: new French regulation on new housings enforced progressively from 2022 (and later on for non-residential buildings)
- 3 main objectives:
  - **Prioritize energy sobriety and decarbonization**
    - Decrease energy consumption of new buildings (by approx. 30% compared to the previous regulation)
    - Plans to entirely phase out the use of fossil fuels in new buildings, starting with individual dwellings by 2022.
      - CLER argued that the priority must remain **the energy efficiency first principle** and advocated also for **some allowances on biogas or district heating**, in order not to let electric heating (which can be expensive and induce energy poverty) be the only solution
  - **Reduce the whole-life carbon (WLC) of buildings, from construction to dismantling**
  - **Take into account the summer comfort of buildings**

- France stands out for the first introduction of requirements that **cover whole-life carbon in the construction of buildings**
  - A significant paradigm shift for the construction industry, which up to now has only had to consider in-use energy consumption.
- Objective: in addition to decarbonate heating, **build more often with low-carbon materials, meaning wood and bio-based materials**
- A concept introduced in 2016 in the [E+C- label](#), as a prefiguration of RE2020 in order to prepare all the ecosystem of actors in advance
- Two new indicators introduced from 2022 and which will progressively be more ambitious:
  - **Ic construction**, which evaluate the emissions of construction products and equipments, as well as their implementation on site
  - **Ic énergie**, which calculate the environmental impact of energy systems
    - Ex: for individual housings, 4 kg/CO<sub>2</sub>/m<sup>2</sup>/y from 2022 (only heat pump compatible, with some limited-in-time derogations introduced for gas heating)



- Method chosen to calculate WLC: the dynamic WLC (as opposed to static WLC)
  - Assigns a **greater weight to carbon emitted today than to carbon emitted in the future**
    - Gives advantage to materials which **emit little during their production** and which **store carbon during the life of the buildings**, like wood and bio-based materials
  - New at the EU level
- Significant push-back from some Member States (esp. Italy and Poland) and industry players, **because of the disadvantage given to high-carbon materials** (cement, steel...)
- EPBD revision should at least:
  - integrate provisions for establishing WLC thresholds, targets, and minimum requirements for new buildings and to calculate and disseminate WLC values for all buildings (if possible), in order to be ready for the next revision