

Paris social housing

construction and renovation

November 2014



Specific goals :

- 30% reduction in energy consumption by social housing
- 30% reduction in greenhouse gas emissions by social housing
- Meet the minimum requirements of the BBC-Effinergie accreditations for new social housing
- 50 kWh/m²/year for new constructions, 80 kWh/m²/year for renovations
- More than 4,500 social housing units for renovation each year
- 30% social housing units in 2030

25%
à 2020



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- More than 200,000 social housing units in Paris
- Thermal renovation of the least energy efficient buildings
- 16,000 renovations globally from 2009 to 2012
- 167 GWh and 28 100 teqCO₂ saved from 2009 to 2012
- 3,681 social housing renovations financed in 2012
- 2,700 new social housing units financed in 2012
- 5,224 units programmed for renovation in 2013

Paris Climate Plan

Paris has more than 200,000 social housing units that are managed by landlords. When the update of the Paris Climate Plan was voted in 2012, **the goal of 80 kWh/m²/year was restated as a reference for major renovations of acquired housing and 50 kWh/m²/year for constructions in order to reduce greenhouse gas emissions and energy consumption in Paris housing by 30%**. New social housing is compelled to respect the minimum requirements of the low-consumption housing accreditation, thus saving 50 GWh/year and 10,000 teqCO₂. The consumption rate required by the Paris Climate Energy Plan is higher than the applicable RT 2012.

If these goals cannot be achieved, thermal renovations should at least enable a reduction of 30% on the energy consumption measured before works began. In more than 83% of cases the first works engaged concern external thermal insulation of opaque walls. Improved ventilation systems are in second place. Since 2011, social housing programmes have been the subject of a standard form that the social housing rental agents submit to the City of Paris providing the detailed technical characteristics of the programmes; whereas a collaborative platform organized by the City of Paris departments provides access to data on energy consumption and emissions by Paris social housing.

To finance the works, the City of Paris allocates subsidies to the social landlords. But **in order to be sustainable, the energy consumption of this property must combine energy performance requirements with the guarantee that social housing tenants will be able to afford the expenses**. Technical choices must therefore be made with a view to achieving an optimal balance between the investment made, the level of performance achieved and the costs generated after the works.

Focus

Examples of completed work, delivered in 2013

- 94 rue Philippe de Girard, 18th

This exemplary construction operation consisting of 30 dwellings won a national prize for wood construction. The technical solutions implemented produced a primary energy consumption of less than 49 kWh_{ep}/m²/year in the new part of the building and 68 kWh_{ep}/m²/year in the rehabilitated part.

- 25 rue Bourgon, 13th

This is an exemplary construction operation consisting of 8 dwellings in the 13th arrondissement. The hemp concrete façade providing high-quality insulation is a first for social housing in France and Paris. Built according to a bioclimatic approach, the expected performance is 45 kWh_{ep}/m²/year, even more ambitious than that of the Paris Climate Plan. This operation is monitored with a follow-up study of actual performance using technical and sociological approaches.

- 7 rue Guénot, 11th

A first positive energy building, this building consisting of 17 new dwellings in the 11th arrondissement was delivered in 2013. In order to meet the challenge of consuming less energy than it produces, the building combines optimal design in terms of construction in a dense urban environment, energy efficiency and renewable energy. Lastly, in order for usage to meet the energy reduction goals of the project, awareness-building activities were implemented when the building was handed over to the tenants and their children.

- ZAC Saint-Charles, 15th

The renovation of 4 buildings in the 15th arrondissement representing 250 dwellings currently shows energy consumption of 68 kWh_{ep}/m²/year, thus halving greenhouse gas emissions. For the tenants this represents savings of 40% on their energy expenses.



Delivery in 2014

[See social housing delivered in 2014](#)

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