



# The Grenelle Building Plan

Climate change in the field of  
construction in France



# A global and complex project

# A global project for the entire building sector

- Buildings are responsible for 42% of energy consumption and 25% of greenhouse gas emissions
- A major challenge for the completion of the Grenelle environmental objectives



# A global project for the entire building sector

- A scope including all kinds of buildings:
  - Private homes (**31M** of houses and flats)
  - Social housing (**4M** homes)
  - Tertiary office buildings and stores (**450Mm<sup>2</sup>**)
  - Public buildings (owned by the State and local authorities) (**400Mm<sup>2</sup>**)
- 4 million professionals to mobilize

# A global project for the entire building sector

- Objectives :
  - 2012: build low consumption buildings (**BBC**)
  - 2020: build positive energy buildings ;  
reduce energy consumption of existing buildings by 100 kWh/m<sup>2</sup>/yr (primary energy)
  - 2050: reduce energy consumption of existing buildings by another 100 kWh/m<sup>2</sup>/yr





# A single and exceptional plan

# A double input / output plan

- A leader for the private field : Philippe Pelletier, lawyer
- A small and agile team based in the ministry of ecology
- 17 workshops bringing together both public and private entities / personalities





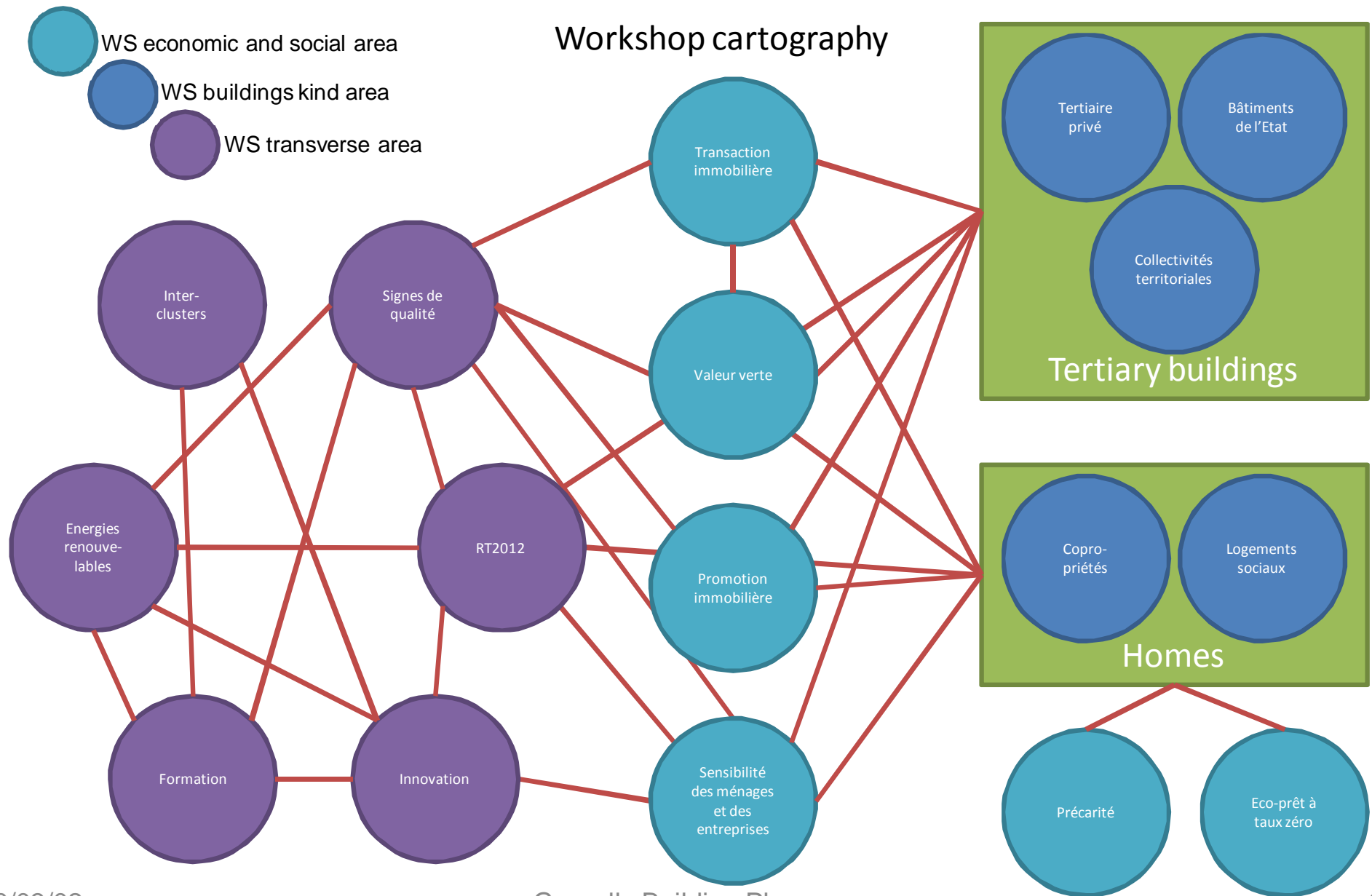
# Targets and outputs of the plan

- Operational recommendations for policies
- Private / public protocols
- Best practices and their diffusion
- More than 700 partners working together
- Measuring progresses in the building sector and the change of society





# A large set of workshops





# A first set of answers

# Encourage then obligate: a middle of the road strategy



- No immediate general obligation, it will come at a later stage
- The population will notified well ahead of time
- During such time, assistance and incentives are provided

# A whole set of incentives for private homes

- Subsidies for the lowest income groups (fight against energy insecurity)
- Tax credits redirected recently into ensuring better housing efficiency (promote the use of clean equipment and insulation works)
- 0 interest loans of no more than 30 000€ for renovation work (paid back over 10 years, a duration compatible with ROIs)

# A first obligation : the 2012 thermal policy (RT2012)

- Prepared by low consumption labels (**BBC-Effinergie**)
- Every new building will be 'BBC' in 2012
- A global requirement based on results: 50 kWhPE/m<sup>2</sup>/yr
- Anticipated by a year for tertiary buildings
- Boosting innovation by considering all kinds of energies whatever the economical context is (coal, gas, oil, electricity, solar, wood, etc.)



# Dealing with supply issues

# A two-fold requirement

- Professionals have to upgrade their skills in the field of energy efficiency
- They also have to acquire large technical vision to bring coherent solutions and cross fertilization

→ Professionals have a two-fold requirement of being both extra specialized and non specialized





# People involved in upgrading skills

- Federations develop a strong vocational training program and labels like ‘eco craftsmanship’ and ‘the energy efficiency’s pros’
- Ministry of ecology, ministry of education and research enforce existing programs
- Associations, territorial networks, etc.
- The professionals themselves !



# Another challenge : to guarantee performance

- Independent groups : clusters brought together by the Grenelle Building Plan
- Boosting innovation in both fields of products, techniques, costs, etc.
- Energy performance contracts
- Certification and labels : from the smallest initiative (Innovation Pass) to the widest one (such as SB Alliance)

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**Le Collectif Effinergie**, created in 2006, aims to promote low energy consumption construction in both new building and renovation projects. It brings together construction professionals and local communities in order to design and construct buildings with real energy efficiency. The members are invited to take part in transverse working groups, where each contributes his specific competence to the service of the Collective. This training experience is one way of valorising our sensitisation approach, transferring knowledge for good use by the players in the construction sector and disseminating new concepts.

create a supportive dynamic within the construction market that makes it conducive to building comfortable and energy efficient buildings

## Our objectives

- Develop building references and tools
- Unite all the players in the sector
- Ensure coordination between governmental authorities and regional initiatives
- Show the technico-economic feasibility

## Our work is carried out by

- Technical commission made up of experts in the sector of energy efficient
- Strategic planning group for territorial development

## Our tools to a low energy building

- Training programmes
- Guides :
  - *Successfully Constructing*
  - *Successfully Converting*
  - *Summertime Comfort*
  - *Grey Energy*
  - *Economic and Financial Aid*
- BBC Observatory  
[www.observatoireBBC.org](http://www.observatoireBBC.org)

## BBC-effinergie® labels in partnership with the Ministry

### Objectifs for:

- new construction: 50 kWhep/m<sup>2</sup>/year for new residences
- renovation projects: 80 kWhep/m<sup>2</sup>/year for existing residences

The **BBC-effinergie®** labels are calculated with a possible variance in order to allow for a particular region's climatic differences.

The consumption – that should not be exceeded – applies to the energy utilizations that can be actively influenced from the design of a building: **Heating, Hot water, Auxiliary appliances for ventilation and heating, Lighting (via natural lighting), Air-conditioning.**

These labels are delivered by accredited organizations of certification :





## Results for BBC-effinergie® labels

Certified or in the course of certification buildings as of October 2009

For new construction:

- Almost 2600 single family homes
- More than 21000 residences
- 50 service buildings



For renovation:

- 123 single family homes
- More than 1300 residences



# Dealing with demand issues



# First encouraging results

Indicators for the 4 sectors of existing and new buildings:



- Homes' energetic renovation: 75 500 zero interest loans for the 8 first months (we expect 400 000 loans per year after 2013)
- Social housing: 35 000 homes renovated in 2009

# First encouraging results

- Public buildings:
  - Local authorities mobilization: many of them are EFFINERGIE active members, whatever the political side
  - Energetic diagnoses in progress for 19 Mm<sup>2</sup> of State building (offices, prisons, prefectures,...)
  - Works' programs in progress for 40% consumption reduction
  - Green lease between ministry departments occupants and representative of the State Ownership
- Tertiary buildings: market sector value and green lease are getting improved



# A good beginning

# A good beginning

- Society at large is getting on board
- No way back
- It is not a sprint, but a long-distance race that will take us all the way to 2050





Thank you for your attention

For further information:

[www.plan-batiment.legrenelle-environnement.fr](http://www.plan-batiment.legrenelle-environnement.fr)