



Country Condition Sheet Solar Urban Planning of France

1 Political framework conditions

1.1 National goals

Reduction of GHG emission base year 1990	
Share of renewable energy in final energy consumption	
Share of renewable energy in	
electricity consumption	
Share of renewable energy in final	
energy consumption for heat	
space heat, cooling and process	
heat and hot water	
Reduction of primary energy	
consumption base year 2008	
Rate of building renovation	

1. Legal framework conditions

1.1. Urban planning

Legislation / Obligations/ Minimal requirements

Urban land use planning

- Urban planning plan (in French "Plan Local d'Urbanisme" PLU) municipality level
- Territorial Coherence Scheme (in French "Schéma de Cohérence territorial") for a group of municipalities

Both documents bring general prescriptions and obligations on urban development through the definition of specific areas. They aim to bring a general coherence in the urban development. The urban planning plan generally includes a Planning and Sustainable Development Programme (PADD) that can bring concrete orientations for the consideration of solar energy within the concerned areas.

link for the PLU: http://www.developpement-durable.gouv.fr/Site-PLU-Temoins.html

The Collaborative Planning area (In French "Zone d'Aménagement Concertée" ZAC) is a specific area defined by the public authority and that gives them the possibility to act within concrete specifications they define. Within a ZAC, a public authority can enforce urban planners and promoters to respect energy consumption or a certain amount of solar energy input.

Local characteristics





Lyon: local reference for zones of activity will fix orientations for energy efficiency and urbanism in zones of activity (integration of renewable energies, thermal insulation, forms of urbanism, environmental integration... among the 4 main themes). First phase of test for the refence until 2015.

http://www.ale-lyon.org/accompagner-agir/developper-les-eco-quartiers/referentiel-za.html

1.2 Passive solar

Legislation / Obligations / Minimal requirements

Thermal Legislation (In French "Réglementation Thermique)

This technical legislation brings obligations for building promoters to limit the consumption of new constructions below a certain amount. The new legislation RT 2012 will apply from october 28th 2011 for school buildings, certain residential buildings and offices and in January 2013 for housing.

http://www.rt-batiment.fr/

Local characteristics

 Lyon: the local system of references for housing and offices on town land compels builders to limit the consumption of new constructions and to integrate renewable energies in their projects. For housing projects the new constructions have to integrate at least 20% of renewable energies.

http://www.logementsocialdurable.fr/

http://www.ale-lyon.org/accompagner-agir/construire-renover/les-referentiels-grand-lyon.html

1.3 Photovoltaic PV / Solar thermal –

Legislation / Obligations / Minimal requirements

Local characteristics

1.4 Opportunities for future improvements

Including solar requirements in the Local urban plan can be a long procedure. In fact even if the the Grenelle 2 law implies taking into account the regional scheme of ecological coherence of territorial climate plans established in the articles 26 and 45 of the project law (article L. 123-1-8) in the Local Urban Plan, a decree from the French national law is necessary to authorize the mayor to take such actions.

In order to anticipate this opportunity technical legal and financial surveys are launch by the urban planning headquarters.

Moreover, it is apparently possible to try integrating solar installations in existing buildings as a result of the city planning document even without the publications of the decree. This subject is being currently discussed

2 Economic framework conditions

2.1 Urban planning -

Subsidy / Grants

National programmes





Federal programmes

Favourable credit / Soft loans

Tax privilege

Cost effectiveness / Example

2.2 Passive solar

Subsidy / Grants

• Bonus on Coefficient of land use (in French COS: Coefficent d'Occupation des Sols) The local authority can allows to higher the Coefficient of land use up to 20% which offers a bigger surface for promoters to build or for the extension of existing buildings. This 20% bonus can be used only if the construction or renovation considers environmental criteria regarding energy consumption.

Favourable credit / Soft loans

Soft loans can be used for the construction of low consumption buildings (BBC label).
 Since the new legislation RT 2012 will apply very soon and will include new requirements for passive solar, the subsidies, favourable credit, tax privilege and soft loans are getting lower.

Tax privilege

Cost effectiveness

2.3 Photovoltaic / Solar thermal

Payment tariffs

Photovoltaic

Feed-in tariffs

The feed-in tariffs for photovoltaic electricity in France depends on the type of system installed (BIPV, non integrated, ground mounted...), the type of buildings (housing, health buildings, commercial buildings...) and the power of the system to be installed (the FIT do not apply above 100 kWp).

In order to know which FIT applies for a specific project:

http://www.developpement-durable.gouv.fr/Quels-sont-les-nouveaux-tarifs-d.html

Power > 100 kWp

For the systems with power above 100 kWp, a call for proposal is published by the Ministry: http://www.cre.fr/documents/appels-d-

offres/%28type%29/Electricit%C3%A9/%28annee%29/2011

Subsidy / Grants

- Tax credit of 22% for PV with a limitation of 8000 € of expenses (for an individual person) that can be considered for the calculation
- Tax credit of 45% for solar thermal with the same limitation





Favourable credit / Soft loans

Soft loans can be contracted for solar thermal within a global work for the housing. For more information: http://www.developpement-durable.gouv.fr/L-eco-pret-a-taux-zero-en-13.html

Tax privilege

Photovoltaic

- 5,5% of TVA for systems below 3kWc installed on existing housing
- Income from a system below 3 kWc held by an individual person are not taxable under the income tax.

Solar Thermal

5,5% of TVA for systems installed on existing housing

For both

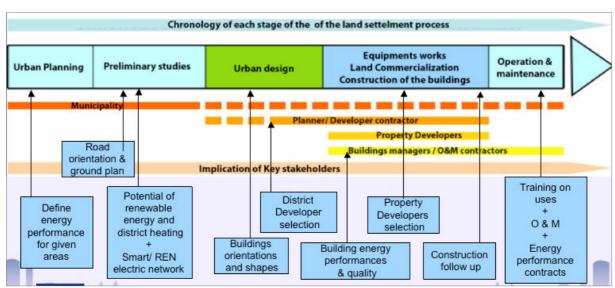
 Real estate tax on buildings: local authorities may adopt texts to exempt from this tax up to 50% or 100% housing with a PV system

Cost effectiveness

2.4 Opportunities for improvements

Photovoltaic: the administrative procedure necessary for the set up of a project is very complex. It is very important to simplify it in order to make it easier for any energy user to develop its own project.

3 Technical framework conditions



3.1 Urban planning

Planning background of solar settlement
Potential
Best practices / Examples





Status: 22 December 2011

3.2 Passive Solar

Planning background / Local characteristics
Potential
Best practices / Examples

3.3 Photovoltaic/ Solar thermal

Planning background / Local characteristics
Potential
Best practices / Examples

3.4 Opportunities for improvements

4 Further reading/information
