

Approaches for assessing energy precariousness in France: from poverty to vulnerability?

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Definition and measurement of fuel poverty: a debate that is still open

- **Different terms to qualify the problem**
 - Fuel / energy
 - Poverty / precariousness / vulnerability
 - **Different definitions**
 - England → a precise definition that has been changed in 2013
 - France → a vague definition since 2010
 - the fact to meet in [one's] home particular difficulties to have the energy supply necessary to satisfy elementary needs because of the maladjustment of resources or of housing conditions*
 - **And different possible methodologies for assessing the problem**
- What objectives and what approaches in France?



Fuel poverty assessments: measuring and diagnosing the problem

- **Measurement** → size of the population that is affected and characteristics
 - Conceptual problem: requires some operational definition
 - Practical problems: existing operational definition impossible to transpose to France - few data available & not frequently collected
- **Diagnoses / inventories** at the territorial level
 - Characterise a **territory** → How many people affected? Where do they live?
 - Characterise the fuel poor **people** locally → Who are they? In which types of homes do they live? What severity of fuel poverty?

French approaches to defining energy precariousness

England :

A definition that was modified in 2013

2001-2013:

Households who need to spend 10% or more of their income for energy

Hills approach excludes certain households & number of fuel poor is less sensitive to energy price increases

Hills review (2012) → Low Income High energy cost

In France :

A vague official definition in the 2010 legislation

Rapport Pelletier (2009):

Actual energy expenses related to income (10% threshold)

National observatory of energy precariousness ONPE (2013) has tested different approaches to estimate the population in energy poverty

French approach excludes rationing & includes over-consumers

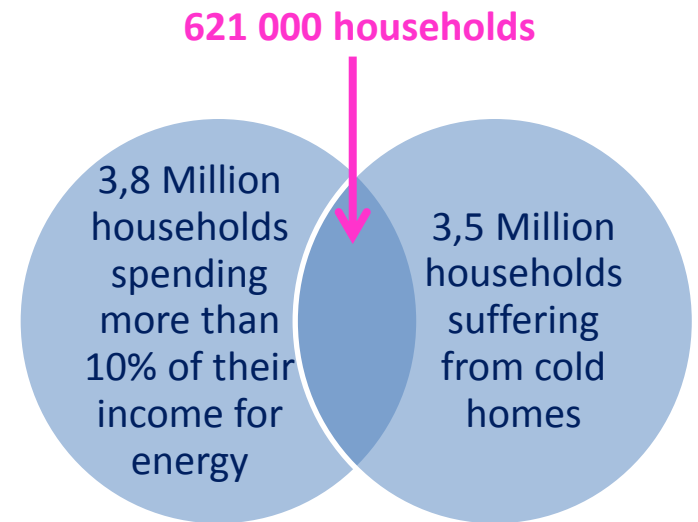
Population in energy precariousness (EP) varies according to estimation methods

How many people in EP?

	% of French households	Number of households	Number of individuals	Individuals per household
Actually spending more than 10% for energy	14,4 %	3,8 M	6,7 M	1,7
Same indicator for three first income deciles	11,0 %	2,9 M	4,6 M	1,6
LIHC (actual expenses)	11,3 %	3,0 M	7,2 M	2,4
Suffering from cold homes	14,8 %	3,5 M	8,1 M	2,3
Suffering from cold homes (restricted to 3 reasons related to EP)	10,2 %	2,4 M	5,4 M	2,2

Source: ONPE (May 2013)

Who are the people in EP?



2006 data

Source : Devalière et al. (2011)

With energy expenses indicator → more single person households, more elderly people and more people living in rural areas

With LIHC indicator → more families and more urban households

1. Assessments of EP related to housing

From national to regional or local approaches

- **Several diagnoses at a sub-national level** (from regions to municipalities)
 - Territorial inventories of EP (ex: region PACA)
 - EP Maps (ex: Poitou Charentes, city of Les Mureaux)
- **With different possible objectives** (not specific to France)
 - Characterise territories (and not only people) in order to guide public decisions
 - Improve the targeting of policy measures
 - Identify actors and initiatives at the level of a territory
 - Predict the EP risk at a small area level

Regional and local approaches in practice

- Qualitative survey in three French regions (Dubois & Barbarit, 2013)
- **Why?**
 - To have an idea of the importance of EP on a territory
 - To characterise the territory and its inhabitants
 - To find areas that are most vulnerable and discover / gain knowledge on new areas
 - To find out which areas should be targeted in priority
- **Who participates?**
 - Several actors with different logics: local governments, elected officials, social workers, associations, energy suppliers
 - Sometimes overlap of competences on EP on a territory
- **How are they used in practice?**
 - Not really used for finding people (local actors know their field of intervention)
 - Territorial equity considerations → only little contribution to the definition of priority areas
 - As a tool for helping public decision-making and for mobilizing local actors on the problematic of EP
 - As a communication tool on energy issues with a larger public

2. An enlargement to EP in transport

- Done both at the regional level in some areas and by the national observatory of energy precariousness (ONPE, 2013)
- **From the general intuition...**
 - Idea that **energy costs are not limited to housing** and that households are also affected by the price of fuel for transport
 - In France, some households **move to distant suburbs** to save on housing costs. But then their transport costs increase
- **... to practical assessments**
 - **Populations affected by EP in transports are not the same than populations affected by EP in their homes** in terms of:
 - Income situation (deciles 3-6)
 - Location (peripheral areas)
 - Type of dwelling (single family homes)
 - **Policy instruments** to address that kind of EP are of a different nature (regional transport policies)

3. Towards approaches in terms of vulnerability

- Vulnerability refers to a more **dynamic** approach & takes into account **risk**
 - What effects of future energy price increases?
 - Which people / areas could be most affected?
- Examples of vulnerabilities discussed in France
 - **Energy price increases** → change of scale of residential and transport EP
 - In general
 - For certain areas
 - Increase of **distances between home and working place** → Transport EP, especially for those households living in peri-urban areas + higher exposure to risk of major car repairs
- Not systematically investigated so far in France:
 - Vulnerability of different types of households
 - And nature of consequences of increasing EP on different populations
 - ex: health effects on children
- More generally, this raises the question of **evolution of lifestyles** (i.e. structural evolutions) and their effects on the cost of residential location

Example: the city of Les Mureaux in the region Ile de France surrounding Paris

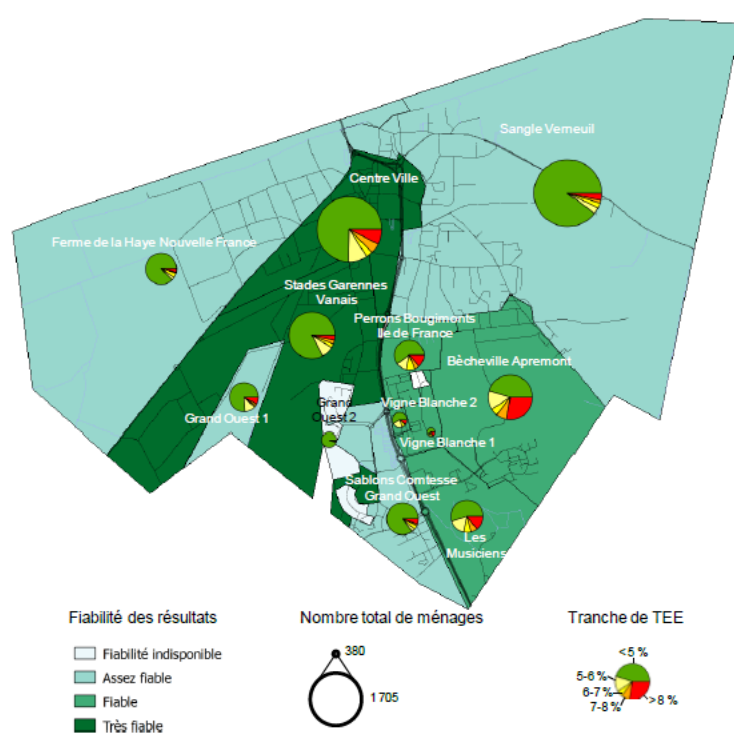


Figure 6 – Répartition des ménages en fonction de leur taux d'effort énergétique par IRIS

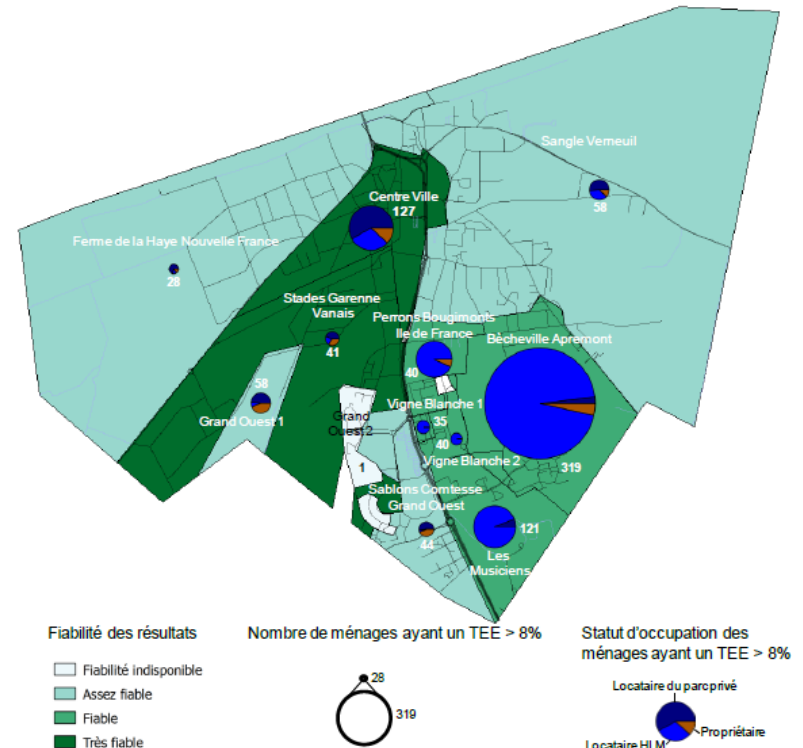


Figure 7 – Statut d'occupation par IRIS des ménages ayant un TEE > 8%

Source : Enea Consulting, Energies Solidaires & Arene Ile de France (2013)

Conclusion

- Recognition that EP is complex and multidimensional.
 - The concept includes a variety of situations:
 - Energy difficulties faced by those households with lowest incomes living in the less energy efficient homes, but also
 - The fact that an increasing share of the population has high (and increasing) budget shares or financial needs for the satisfaction of their basic energy needs
 - Which makes assessment complex
- An evolution of approaches for assessing EP at the regional/local level
 - From first (and still dominant) analyses in terms of actual energy budget shares
 - To multidimensional and qualitative approaches that try to incorporate different vulnerability factors

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