

# Developing Energy and Environmental Planning Scenarios Based on Ethnomethodology: a Case Study Conducted for the Residential Sector in Geneva

Emmanuel Fragnière\*

Roman Kanala\*\*

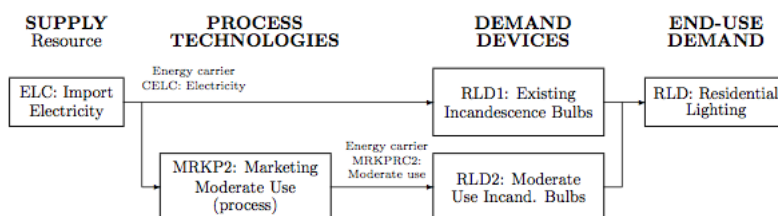
Nathalie Turin\*

\* Geneva School of Business Administration

\*\* University of Geneva, Climate group

## Socio MARKAL definition (1)

- At least one demand technology with irrational use
- At least one virtual process technology : info/marketing in favour of rational use

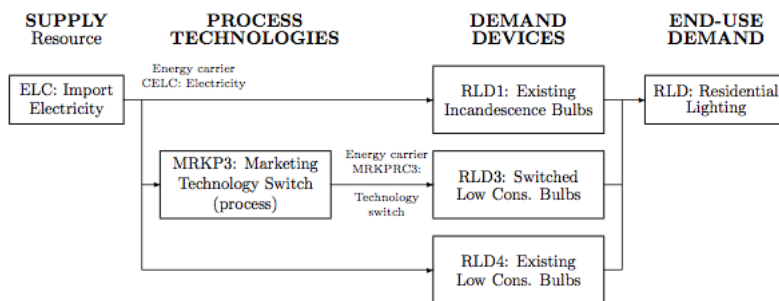


Assessing and elimination of deviation of observed behaviour from the hypothesis of

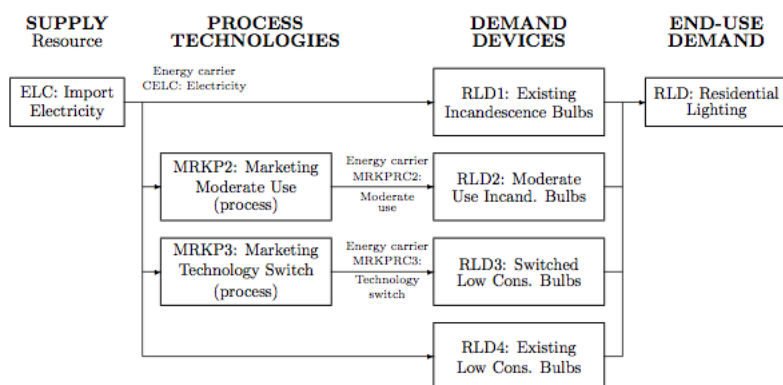
- Perfect information
- Perfect economic rationality

## Socio MARKAL definition (2)

- At least two demand technologies in competition: a traditional and a new one
- One of them is rational choice but is not always selected
- At least one virtual process technology: info/marketing for technology switch

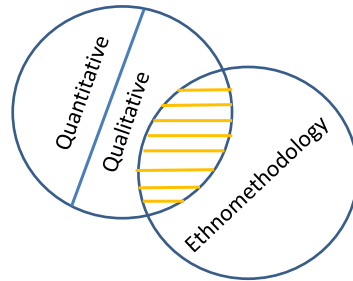


## Nyon lighting case



- Two «real» technologies :
  - Old incandescence bulbs
  - Low-cons bulbs
- Two «virtual» technologies :
  - Rational use
  - Technology switch

# Ethnomethodology



Ethnomethodology shares some attributes with classical qualitative sociology.

Purpose : marketing, business, source of hypotheses for measuring quantitatively

## Parameters of survey

- October 2010 through June 2011
- 22 interviews, 5 open questions, narrative responses
- 15 Men, 6 Women, 1 Unknown
- Transcriptions
- Processing

## Interesting hypothesis (1)

- People are more sensitive to energy consumption when it is visible:  
lights on, running a car engine, energy bill...

(what you see is what you try to save)

## Interesting hypothesis (2)

- Advertising campaigns encouraging more consumption are prevailing over energy saving campaigns.

(visibility, efficiency, budget, ...)

## Interesting hypothesis (3)

- Savings in domestic energy consumption is financially not interesting enough to be brought to practice.

(electricity is too cheap compared to phone bill, TV plans, gasoline...)

## How to process these hypotheses

- Design a quantitative survey to measure:
  - Part of people who already behave rationally
  - Part of people who could change their behaviour if better informed
  - Part of people who do not want to change
- Identify barriers to change in order to try to remove them
- Find proxy parameters characterising the behaviour

## Conclusion

- Through the use of ethnomethodology survey, one can identify properties to measure, as well as hypotheses to test with classical sociological survey to extract technical coefficients for MARKAL
- Ethnomethodology points out the real world issues from the perspective of the consumer