## An evaluation based on Service Economy theory

Evaluation of an EDF supported refurbishment program in rural area

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En Meuse et en Haute-Marne ensemble, économisons l'énergie!

oEDF MDE 52-55 program

oService Economy theory

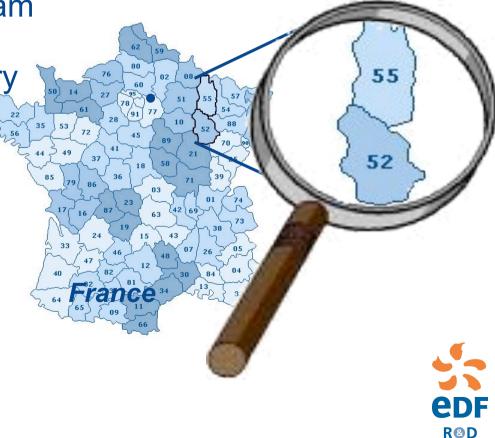
Assessment

Onclusion

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## MDE 52-55 program

• Context :

• Economic development program in Haute-Marne and Meuse

o 2006-2010

• Who :

• Households, social housing, public services

- Territories
- Craftsmen and local building firms



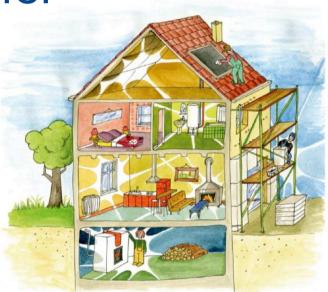
En Meuse et en Haute-Marne

- Goals :
  - To propose efficient home refurbishment solutions with renewable energies
  - To make an example in the field of energy efficiency
  - To create jobs in the studied territories



## EDF refurbishment offer

- Attractive loan for customers
- Technical requirements
  - Energy performance level
- Structure of the offer
- ne offer
  - Integrated renovation work encouraged (multi-pack)
  - From "three stars" offer to "five stars" offer
- Support to local industries







 Production and sale of a solution made of a non-splitable integration of products and services

Incorporation of external factors in meeting the functional needs

To annex

- The value creation is not linked any more with the production of objects (user value)
- A high level of interaction with the local economic development (territory)





## Why Service Economy is relevant for our project ?

- A performance-based commitment : improving the dwellings comfort and performance
- Another goal : organising and improving the skills of the local industry through specific education so that they can deal with energy-efficiency packs
- Territorial economy and social impacts are key points considered in the program



## Comparison of a traditional energy efficiency program and MDE 52-55

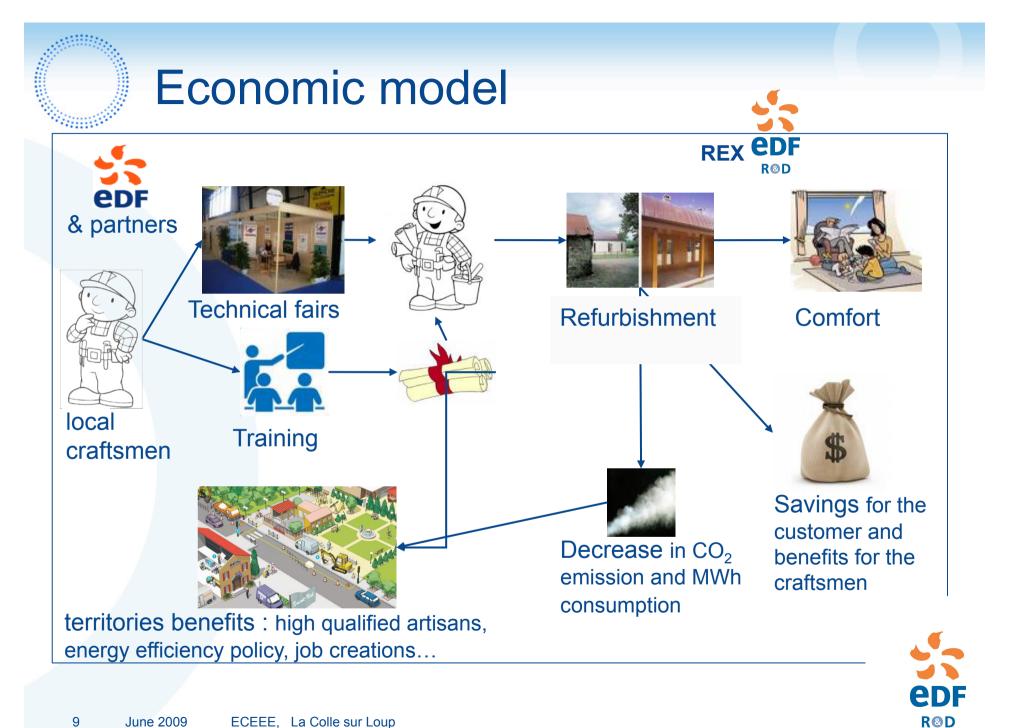
|                            | Traditional programs   | Service Efficiency -MDE 52-55 Program   |
|----------------------------|--|---|
| Target<br>customers        | Households or social owners                                    | Authorities (territories) of the Departments code 52 and 55                   |
| Target<br>recipients       | Households or social landlords (or housing associations)       | Households, local authorities Installers, social landlords                    |
| Offer description          | Subsidising or loans for energy efficiency work →getting white | Local economy development through the support of qualified E.E work for :     |
|                            | certificates : boiler replacement, insulation,                 | - households  |
|                            |  | - local installers  |
|                            | Single or combined EE operations indistinctly supported        | - the region  |
|                            | Training courses proposed to large nation-wide installers      |   |
| Evaluation criteria of the | Obtained white certificates                                    | Regional economic development (employment : direct and indirect job increase) |
| program                    | Generated turnover   | Improvement in installer qualification  |
| performance                |  | Obtained white certificates   |
|                            |  | Generated turnover  |
| Z lupo 2000 E(             |  | EDF   |



## Assessment : a service economy chart

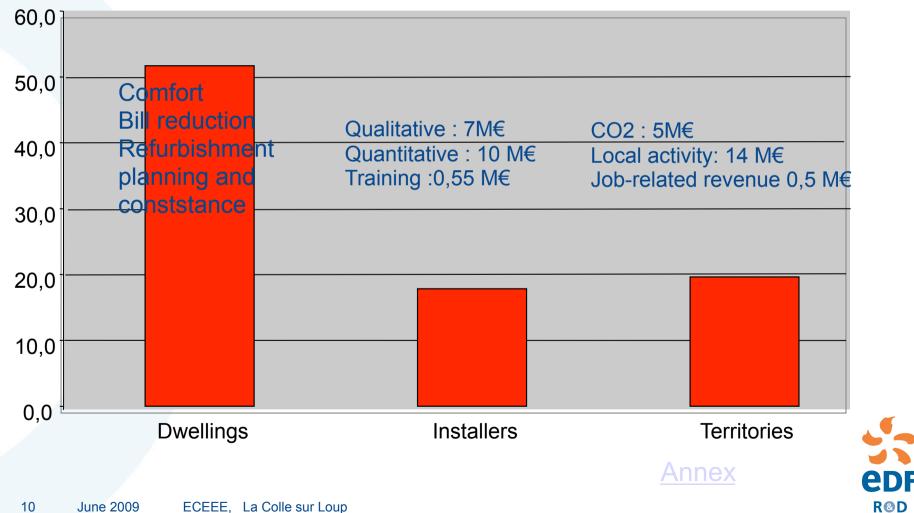
- The economic model
- The marketing
- The system of actors
- The measures to accompany the changes
- The organisation of the work





## Financial evaluation of the value brought by the MDE 52-55 program

Financial evaluation (in M€) of the "MDE 52 55" program split by kind of stakeholder





## Challenges to face

 In spite of trainings, installers still feel uncomfortable in promoting products beyond their traditional competences field

- A multi-skilled network still in construction for a faster development of « multi-pack solutions »
- The role of installers as advisors in energy efficiency to be clarified or strengthened



# Benefits and costs related to the MDE 52-55 program (for each kind of stakeholder)

| Actors                  | Benefits  | Costs  |
|-------------------------|---|--|
| EDF                     | Experimentation of new energy efficiency offers       | Financial and technical support                                  |
|                         | White certificates                                    |  |
|                         | Experience in large-scaled energy efficiency programs |  |
| Local<br>authorities    | Local economic development                            | Communication expanses   |
|                         | Increased attractiveness                              |  |
|                         | Competence network                                    |  |
| Local building<br>firms | Improved skills                                       | EDF Network subscription   |
|                         | Integrated refurbishment work with higher added-value | Personal investment during training sessions                     |
|                         | Competence network                                    | Additional staff expanses (included research for skilled people) |
| Households              | Improved comfort                                      |  |
|                         | Easier refurbishment work planning                    | edf  |
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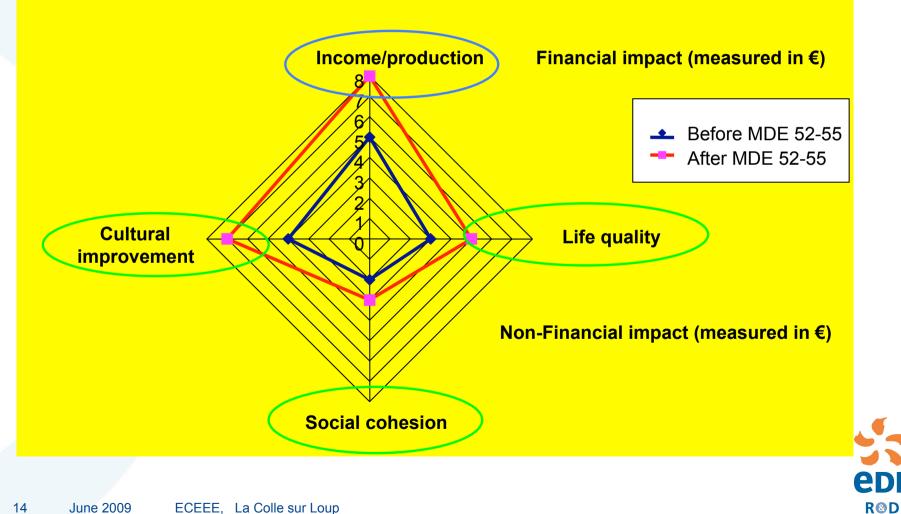
 A new methodological approach for the development of assessment tools

- A new sight in order to understand relationship between energy efficiency and economic development...
- ...Although the program itself was not developed in such a vision
- A sight which could inspire oncoming regional energy efficiency policies...





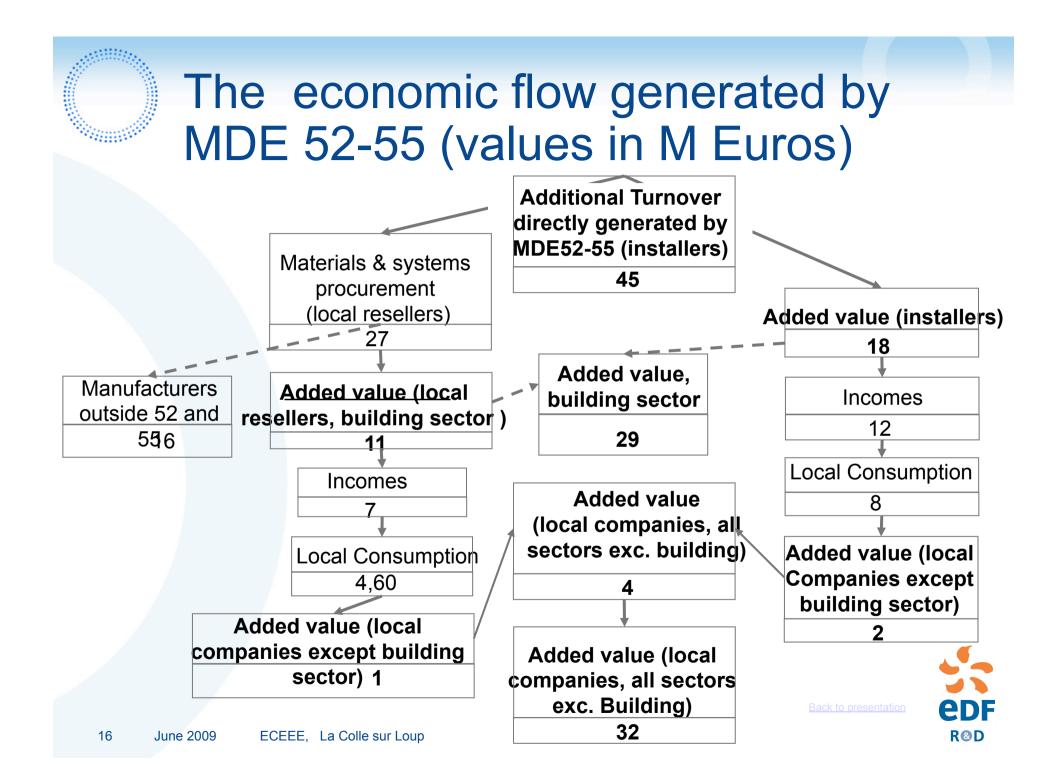
A proposed scheme of a full standing impact economic impact analysis of the MDE 52-55 program





### Annexes







## Annex : Michelin and the service economy theory



#### Service economy theory world

## Firms rent their tires, and buy a long term service

Michelin is the owner of the tires, and contracts with the firm to maintain its fleet tires

Before the tires are damaged :

- the truck tires are regularly checked
- used tires are replaced and repaired/



Michelin benefits increase if the tires last long



### Annex : assessment of realised work, at individuals', from nov. 2006 to feb. 2009

- Number of realised refurbishment work : 9506 (1684 in 2009)
- Craftsmen in the network : target 300 in 2009
- Trained persons : 354
- Jobs created : 106 (since beginning, nov 2006)
- Cumac (GWh) : 460 since beginning

