Analysis of a pilot project promoting more efficient refrigerators and freezers through a French mail order catalog

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1. SYNOPSIS

First results in terms of:
1.1. consumers information,
1.2. shift in product offer to consumers,
1.3. shift in sale to consumers,
1.4. energy saving per year and nationwide extrapolation.

2. INTRODUCTION

According to the D.S.M. Agreement between ADEME and EDF, a deep cooperation with a major mail order Company has been settled in order to promote the sales (to consumers) on the French market. Another objective is to stimulate the European manufacturers to offer the market more energy efficient appliances by displaying the vew label from European Union along with a financial incentive to upper efficiency models.

3. DESCRIPTION

3.1. display of the new labelling scheme prepared by DG XVII (directive 94/2 CE) for domestic appliances (refrigerators and freezers) on a double page of Spring Summer 95 mail order catalog with a circulation of 7 500 000 copies (nearly one french family out of three).

3.2. design of a specific label for mail order and implementation throughout the range of refrigerators and freezers sold in the catalog.

3.3. information and education of the consumer about efficiency performance of domestic appliances and presentation of life cycle cost benefits.

3.4. offer of 200 French francs financial incentive on more energy efficient refrigerators and freezers in categories A & B.

4. MARKET ANALYSIS BEFORE PILOT PROJECT

split from "A" to"G" class of:
the offer and sales on the french market

Table 1: Offer and sales on the French market

CLASS	A	B	C	D	E	F	G
% SUPPLY	0,5	6,90	15,1	18,5	28,1	20,9	10,0
% SALES	0,2	5,30	10,8	17,1	28,3	27,4	11,2
RATIO	0,4	0,77	0,72	0,92	1,00	1,31	1,12

We note a disruptancy between the distribution of the supply (offer) of models and the distribution of real sales. There is a smaller market share in sales than in offer for high energy efficient ampliances (class A, B, C) and a larger market share in sales than in offer for low energy efficient appliances (class E, F, G).

5. MAIL ORDER OFFER BEFORE AND AFTER THE PROGRAM

Table 2: Mail order before and after the program

CLASS	A	B	C	D	E	F	G
S/S 94	2	15	22	13	26	18	4
S/S 95	0	28	14	25	23	7	3

6. NATIONAL ENERGY SAVING AT STAKE

Based on the hypothesis: we keep the same ratio between market share in offer and sales

Table 3: National energy saving at stake

CLASS	A	B	C	D	E	F	G
% offer and sales (before)	0,85	12,26	16,81	12,7	27,6	25,03	4,76
% offer and sales (after)	0	23,91	11,18	25,51	25,51	10,17	3,73
average class index	54	65	82	95	105	117	126

Table 4

general index before 98,53
generla index after 92,32
annual saving for the first year:
(98,53 - 92,32) x 1100 = 68,31 GWh/year

extrapolation for a 11 years period

10 + 9 + 8 + 7 + 6 + 5 + 4 + 3 + 2 + 1 = 3757 GWh

with a 80% replacement ratio: 44 x 68,37 = 3005 GWh

We can see that the introduction of the label plus the rebate scheme generate savings accounting to more than 3000 GWh over a 12 years period.