

Lessons from a decade of efficient product market analysis

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Topten – Efficient Products / Market Analysis

- What is Topten:
 - International programme
 - Transform the appliance and product markets towards less energy consumption
- How does it work:
 - Inform consumers about most efficient models available on the market → Best models are presented in details on-line
 - Market analyses → Provide evidence / facts to all stakeholders involved in making regulations and policies



Topten homepage in Switzerland



Les meilleurs produits en 1 clic!

Deutsch Français Italiano

Recherche... 

Dialogue Sitemap Nos objectifs Nos partenaires



Ménage



Maison



Eclairage



Bureau / TV



Mobilité



Loisirs



Energie durable



Froids professionnels

News

Campagne eau chaude
[Comment économiser de l'eau chaude?](#)

EcoMobiListe 2015
Les voitures au gaz naturel en tête du palmarès
[Communiqué de presse](#)

Nouveauté
CarPlanet: [App](#) vous offrant l'évaluation environnementale de 1600 voitures de tourisme.

DÉCLICS
des idées pour consommer moins
[Remplacer les chauffe-eaux électriques par des chauffe-eaux pompe à chaleur \(ou boiler PAC\).](#)

Lumen. Watt. Candela...

Concours

[Prévenir vaut mieux que guérir](#)



Actualité

Laver «cool» à 20°

- convient pour le linge peu et normalement sale
- consomme jusqu'à 70% d'électricité en moins
- préserve les tissus et les textiles

Téléchargement PDF: [FR](#) / [DE](#)
Partagez vos expériences avec le lavage à froid [ici](#)



Top-Themes

 [recommandations](#)
[critères de sélection](#)
[documentations](#)

 [Aperçu des Programmes d'encouragement des communes, régions et compagnies d'électricité](#)

 [Incitations pour les réfrigérateurs et congélateurs efficaces](#)

 **ECO-COMPARATEUR**
[Calculez avant d'acheter](#)



Topten homepage in Germany

The screenshot shows the EcoTopTen website homepage. At the top left is the EcoTopTen logo, a stylized 'E' inside a circle, with the text 'EcoTopTen' below it and the tagline 'Die Plattform für ökologische Spitzenprodukte'. To the right of the logo are navigation links: 'News', 'Beschaffung', 'Downloads', and 'Über uns'. Further right is a search bar with a magnifying glass icon. Below the navigation is a horizontal menu with categories: 'Beleuchtung', 'Wärme', 'Strom', 'Große Haushaltsgeräte', 'Kleine Haushaltsgeräte', 'Fernseher', 'Computer / Büro', 'Mobilität', 'Lebensmittel', and 'Textilien'. The main content area features a large image of a vacuum cleaner. Below the image is the text 'ECOTOPTEN TIPP Staubsaugen' and 'Wir empfehlen Staubsauger der Energieeffizienzklasse A'. To the right of the vacuum image is a 'Newsletter' sign-up button with the EcoTopTen logo and a Twitter icon below it. At the bottom of the main content area are three boxes with text: 'Elektrofahrrad ja, aber welches? EcoTopTen informiert und empfiehlt', 'Professioneller Einkauf EcoTopTen bietet Ihnen als Beschaffer folgende Vorteile:', and 'Relaunch Plattform EcoTopTen – nachhaltige Produkte jetzt noch leichter finden'.



Topten homepage in France

guidetopten.fr

Qui sommes-nous? | Partenaires | Blog | Topten Pro | Contact

Recherche...

Électroménager
Laver et cuisiner sans gaspiller

Téléviseurs
Les télévisions les plus performantes

Informatique
Éviter la surchauffe

Ampoules
Les meilleures alternatives à la bougie

Voitures
Rouler en polluant moins

POUR VOS ACHATS SUIVEZ L'EXPERT ÉNERGIE

Dernières infos de l'Expert

Le Blog

Acheteurs professionnels
Commande publique
Topten Pro



1 click: product category and subcategory

The screenshot shows the website topten.fr with a navigation menu open for the 'Réfrigérateurs' category. The menu lists various refrigerator types: Table Top, 1 Porte sans congélateur, 1 Porte avec congélateur, 2 Portes (highlighted), and Combinés. The background features a meerkat and the text 'VOS TS' and 'L'ÉNERGIE'.

topten.fr

Qui sommes-nous? | Partenaires | Blog | Topten Pro | Contact

Recherche

Électromé
Laver et cuisiner sans g

Téléviseur
Les télévisions les plus perfor

Informatiq
Eviter la surchauffe

Ampoules
Les meilleures alternatives à la bougie

Voitures
Rouler en polluant moins

Aspirateurs

Machines à café expresso

Lave-linge

Sèche-linge

Lave-vaisselle

Réfrigérateurs

Congélateurs

Conseils sur la cuisson

Conseils sur la Clim

Conseils sur les veilles

Table Top

1 Porte sans congélateur

1 Porte avec congélateur

2 Portes

Combinés








VOS
TS

L'ÉNERGIE



1 click to the product

Recommandations réfrigérateurs Critères réfrigérateurs

	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
comparer							
Marque	AEG	Siemens	Liebherr	Liebherr	Electrolux	Liebherr	Modèle économe non conseillé
Modèle	SKS91240F0	KI42LAD40	KBP(es)3864 *	IKP 2354	ERN3017FOW	IKBP3554	
Coût total (achat+15 ans d'électricité en €)	1'361	1'111	1'914	1'319	1'150	2'473	1'530
Prix moyen d'achat (€)	1'200	950	1'455	1'160	990	2'000	650
Facture électrique sur 15 ans (€)	161	161	459	159	160	473	880
Volume total (litres)	202	195	336	205	294	291	302
Volume réfrigérateur (litres)	185	180	306	189	268	263	267
Volume congélateur (litres)	17	15	30	16	26	28	35
Nombre d'étoiles	4 Etoiles	4 Etoiles	4 Etoiles	4 Etoiles	4 Etoiles	4 Etoiles	4 Etoiles
Intégrable	Oui	Oui	Non	Oui	Oui	Oui	Oui
Hauteur (cm)	122,5	122,1	185,2	121,8	177,2	177	177,2
Largeur (cm)	56	55,8	60	55,9	54	55,9	54
Profondeur (cm)	55	55	63	54,5	54,7	54,4	54,7
Temp. ambiante conseillée (°C)	10-43	10-38	10-43	16-43	10-38	10-43	10-43
Froid ventilé	Non	Non	Non	Non	Non	Non	Non
Zone 0°C	Non	Non	74	Non	Non	92	Non
Indice d'efficacité énergétique	21,8	21,9	21,9	21,9	21,9	21,9	44
Classe énergie	A+++	A+++	A+++	A+++	A+++	A+++	A+
Consommation énergie (kWh/an)	120	114	157	122	145	162	301
Niveau Sonore (dB(A))	34	34	38	35	35	35	36
							

- Commercial reference
- Purchasing price
- Pictures
- Volume / Size
- Functionalities

But also








- Total cost, including energy consumption over the life time
- Comparison with a “non recommended model”



1 click to the product

Recommandations réfrigérateurs ⓘ Critères réfrigérateurs

comparer

Marque	AEG	Siemens	Liebherr	Liebherr	Electrolux	Liebherr	Modèle énequivore non conseillé
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1 more click:

- Selection criteria page: transparent methodology
- Advice for buyers and users to save energy



www.topten.eu European Portal



Access to consumer information in 16 European countries

News section – mainly Policy Topics (subscribe to the Topten Focus newsletter)

Topten documentation, including Public Procurement



2005 / 2015: a critical decade for product efficiency

- A new policy start: 2005 Ecodesign Directive, 2010 the new Energy label Directive
- Energy efficiency gained in visibility and interest
- Efficient technologies have been boosted (e.g. TV, lighting)

→ Good timing to get market insight

→ Impacts of policy and technology on availability and deployment trends for BAT?



Data – A note of caution

- Statistical analysis on a very small and specific portion of the market (BAT) with country specific selection criteria, changing over time
 - Trends and findings are not representative of the whole market
 - No extrapolation possible
 - Model based findings (not sales based)

- Between 2008 -2014 (comprehensive and comparable data)
- Annual energy consumption values as declared by manufacturers (standardised duty cycles and measurement methods)
- Adaptation when change of regulations / standards / definition of various modes, etc.



Data – 3 countries / 5 types of products

- Switzerland / Germany / France
 - Sufficient historical data
 - Differences in residential electricity consumption: same availability / affordability of top products?
 - CH outside the EU with specific regulations
 - 1 Europe / 28 marketing strategies for manufacturers?
- Five product groups
 - Fridge-freezers (compression, 2 doors)
 - Upright freezers (no “table top”)
 - Washing machines (front loading)
 - Dishwashers (60 cm)
 - TVs (diagonal 80 to 89 cm)



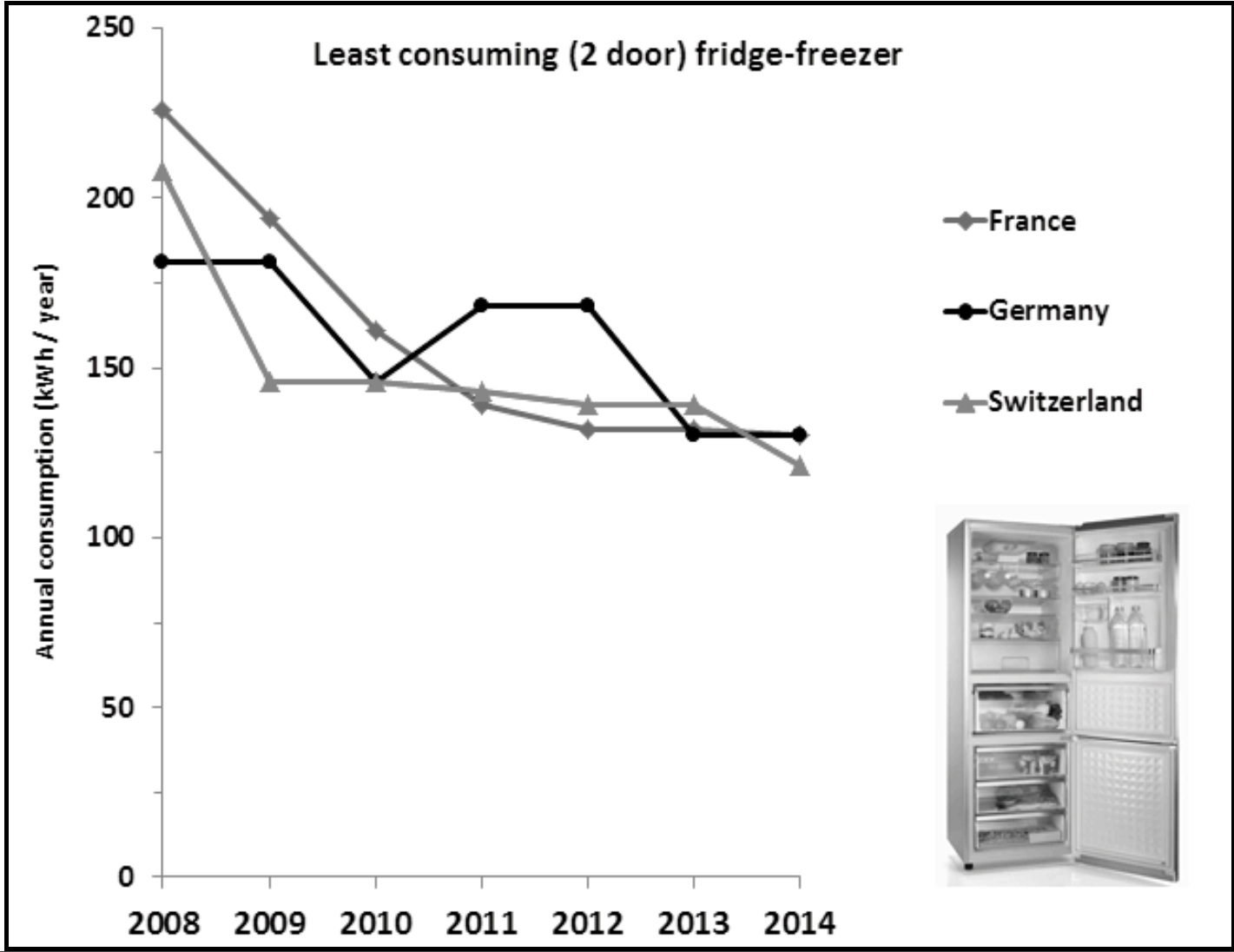
1 - Top performer trends

- Evolution of the performance of the Top #1 on the market (least consuming model in the Topten selections)
- Get an idea of the pace of innovation and efficiency breakthrough in the last 7 years

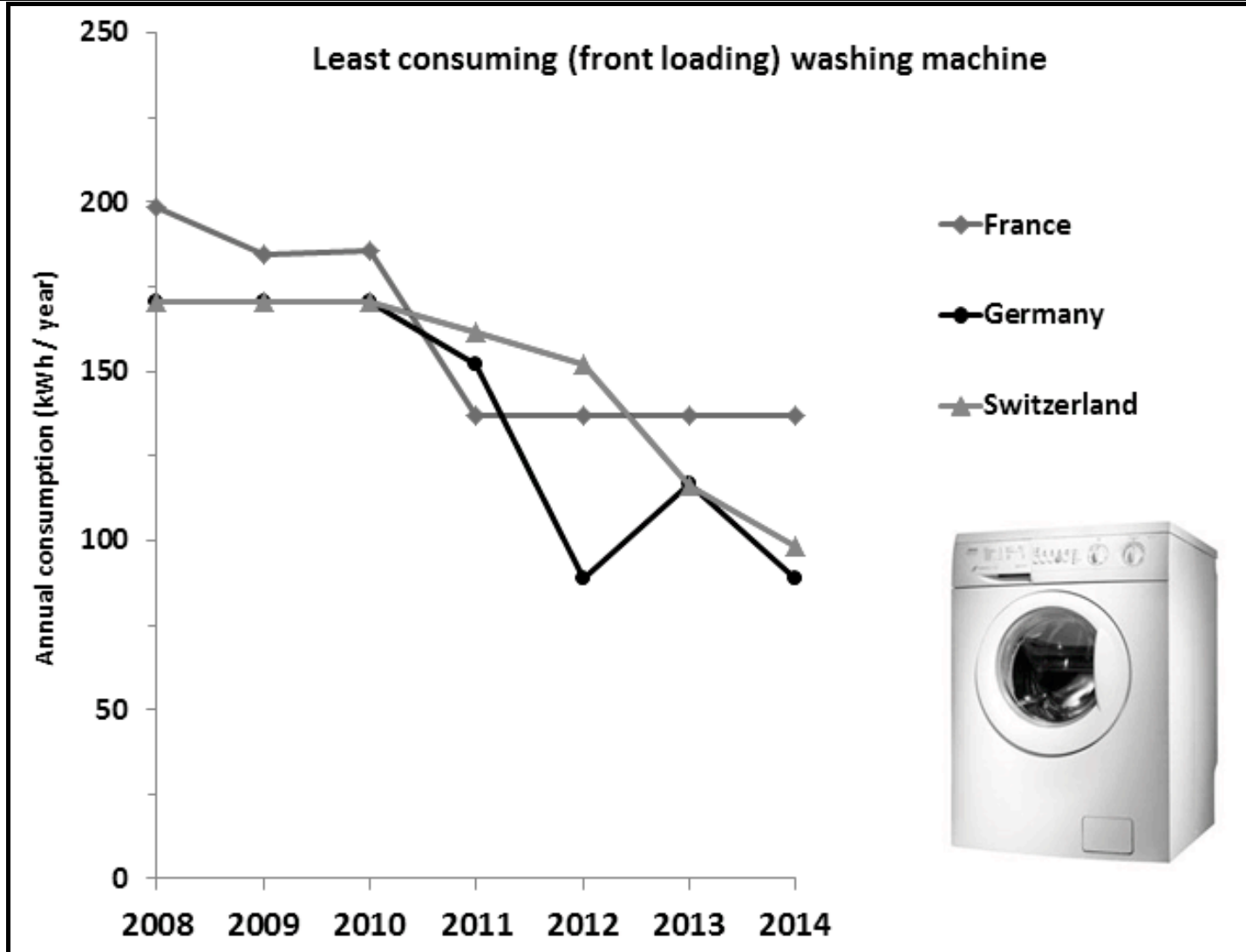
→ Industry made real progresses, though not linear



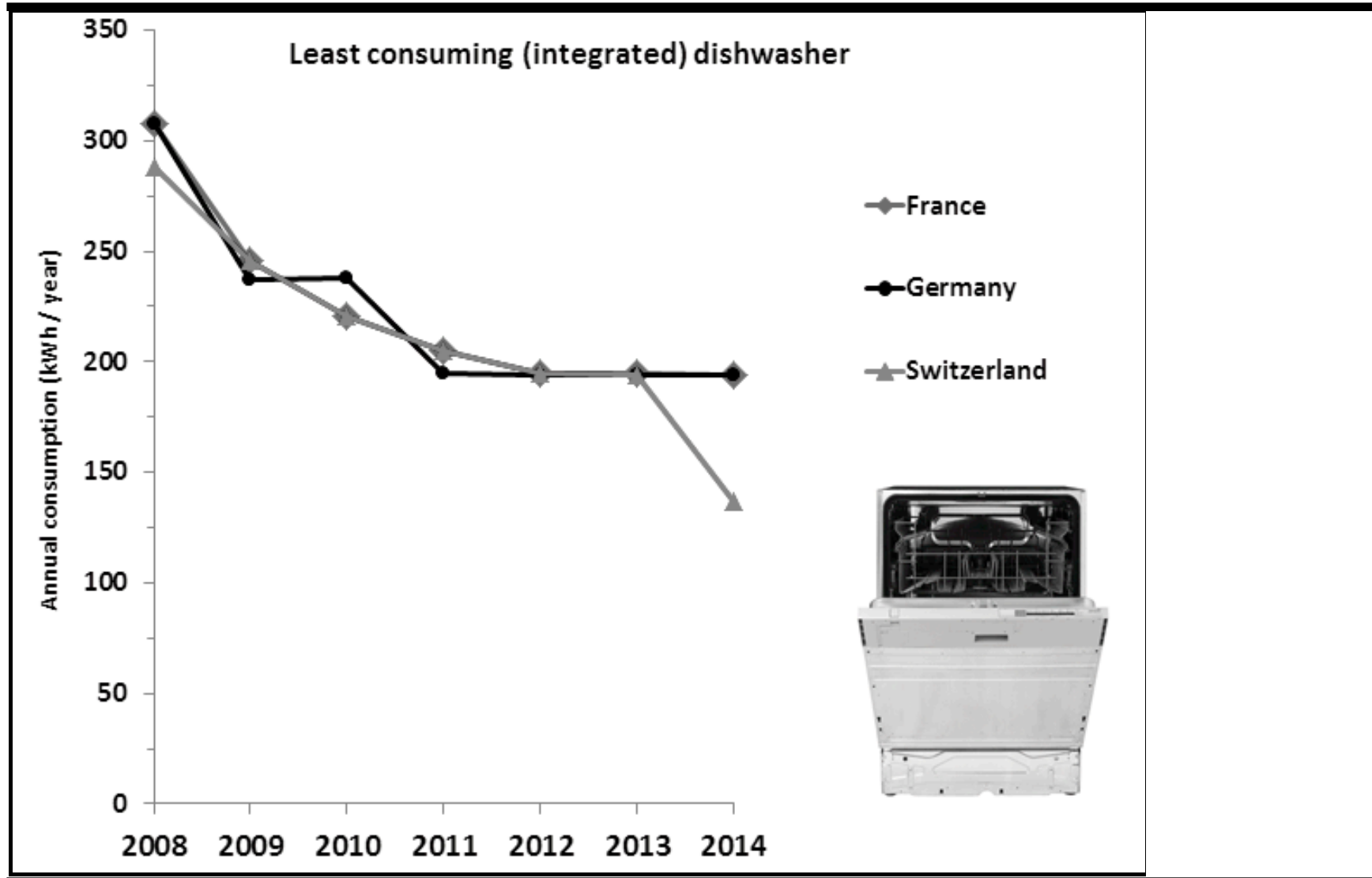
Fridge-freezers



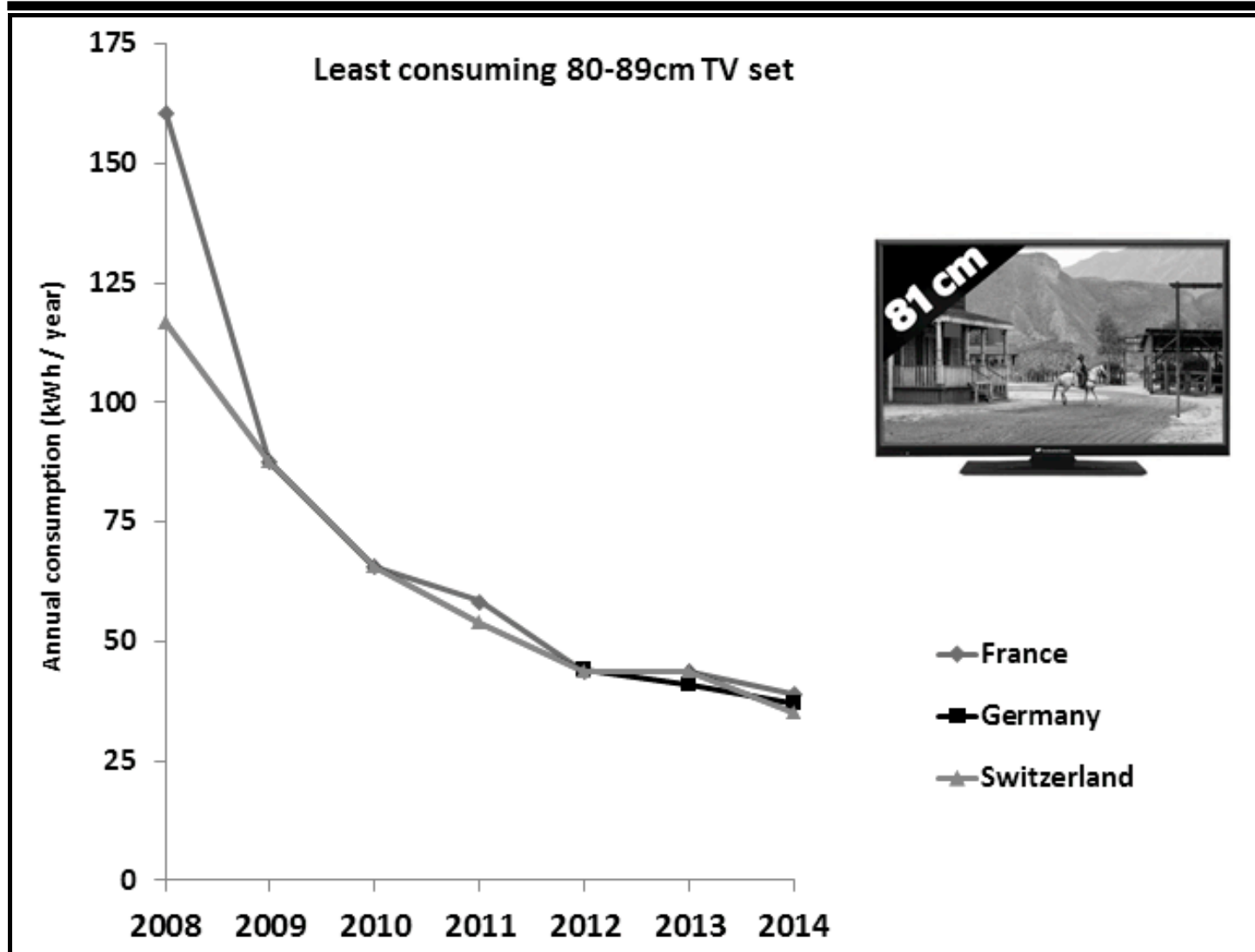
Washing machines



Dishwashers



TVs



Findings on Top performer trends

- Manufacturers were able to make progresses: 25% to 50% less consuming products placed on the market (despite opposing trends)
- Hypothesis on the stabilisation trend since 2012:
 - Higher costs to reach further efficiency levels
 - EU policy dynamics: less impact due to the introduction of new classes on the label (2008-2010) allowing product differentiation
 - Greater market integration as there are less differences between countries in 2013/2014 (exception washing machines in FR)



Findings on Top performer trends

- Striking overshooting of policy instruments

	Best model on the market in 2008	Best model on the market in 2014
Fridge-freezer	A++	Exceed A+++ by 25%
Washing machine	A+	Exceed A+++ by 50%
Dishwasher	A+	Exceed A+++ by 40%
TV	D or E	A++

- Reflecting both:
 - Sustained technological progress during the period
 - Insufficiently ambitious new energy labelling classes

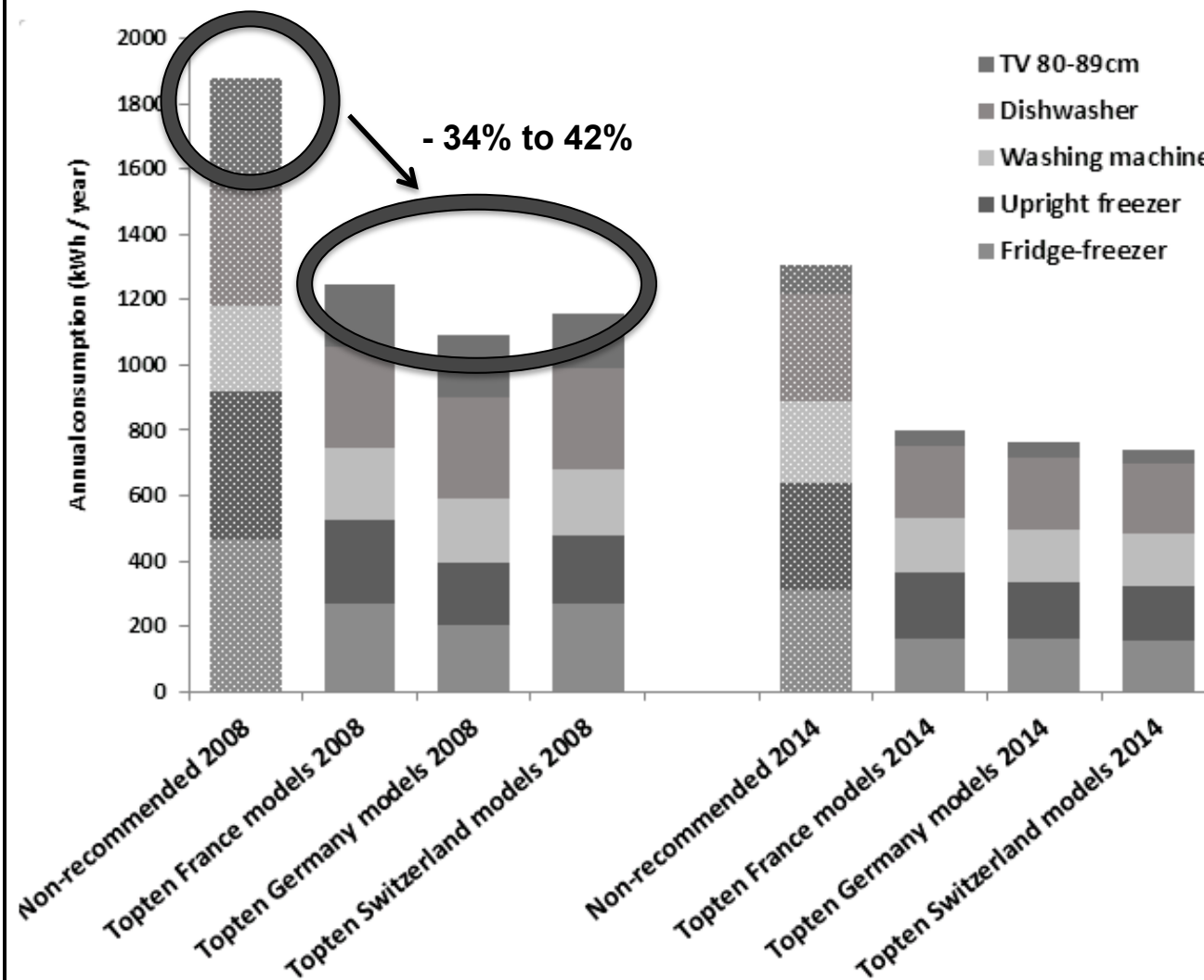


2 - Impact at household level

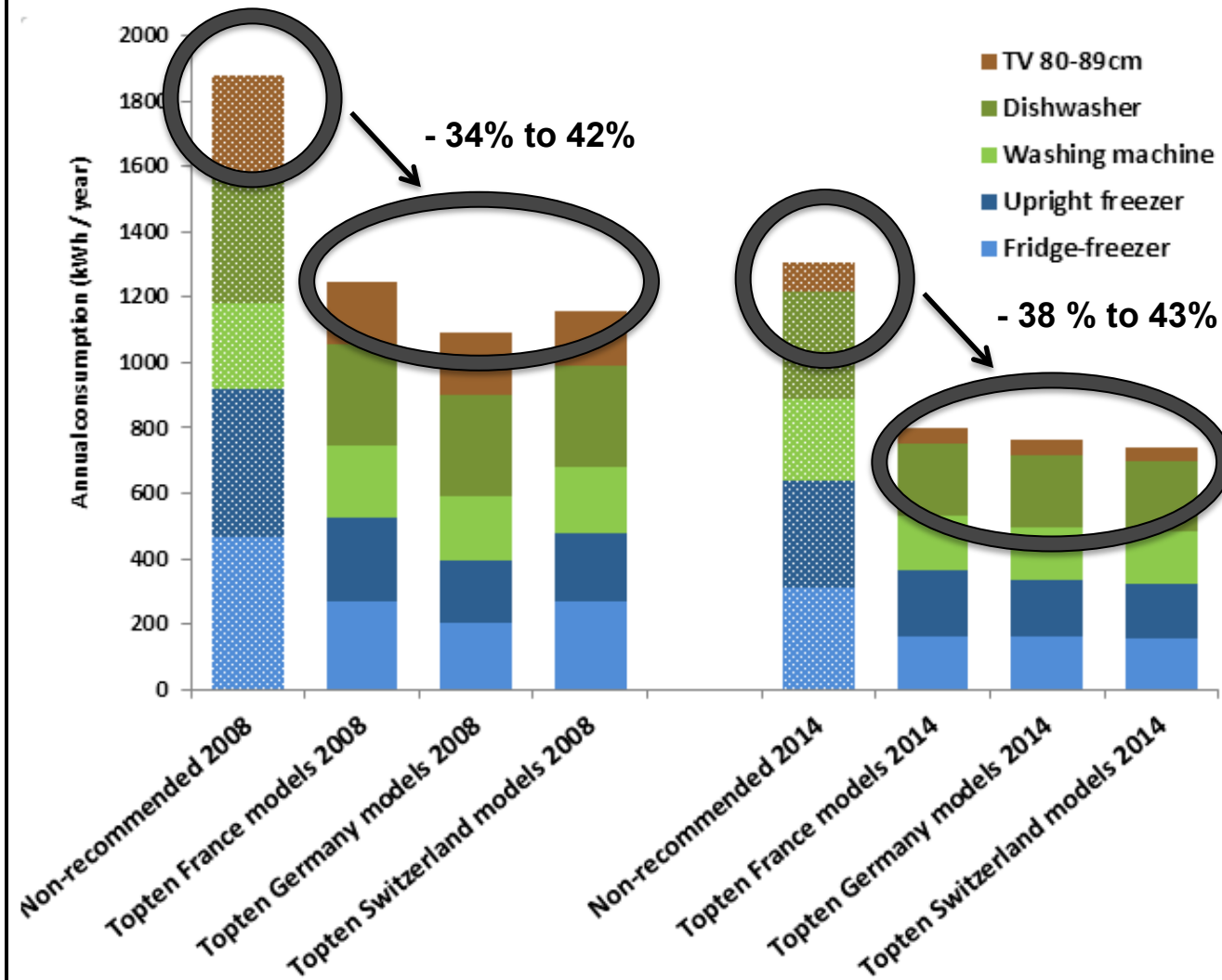
- With Ecodesign banning some products: How far are Topten models still interesting/useful?
 - Compare consequences of buying Topten recommended versus low-end products at different points in time
-
- “ Non-recommended” models are real products, close to the least performing ones, taken from the French market
 - Based on all Topten products (not only #1).



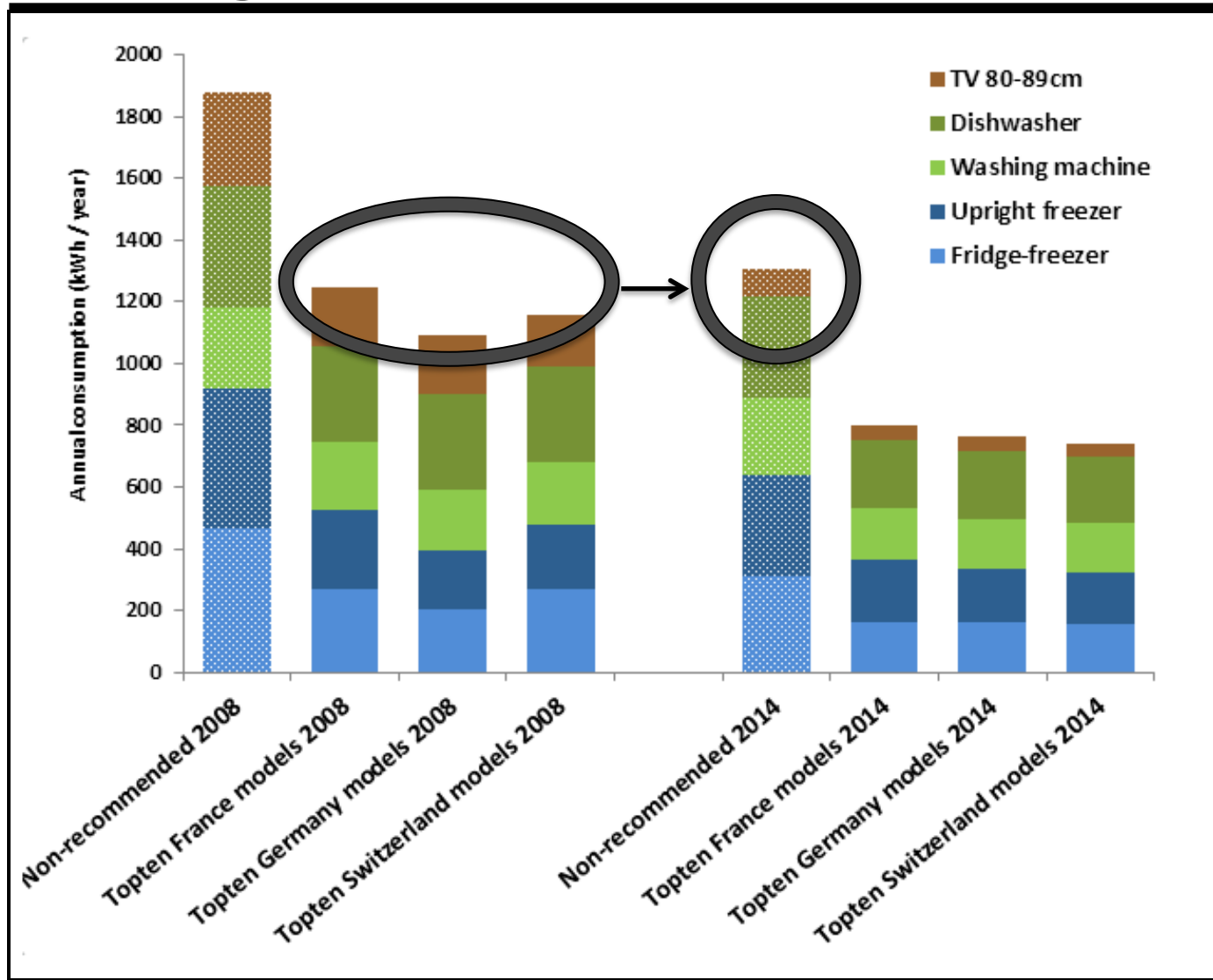
Findings on the impact at household level



Findings on the impact at household level



Findings on the impact at household level



“Worst 2014” similar to “Best 2008”

7 years: reasonable timeframe to get a complete market upgrade (interesting for policy!)

But: impact of TV steep improvement

Ecodesign far from prescribing 2008 Best levels:

There are still savings to be made



3 - Affordability aspects

- Good progress in efficiency / Benefits for consumers
- But are top efficient products affordable?

- Price premium typical market rule:
 - With time BAT trickle down the range of products
 - The price premium attached to BAT also diminishes

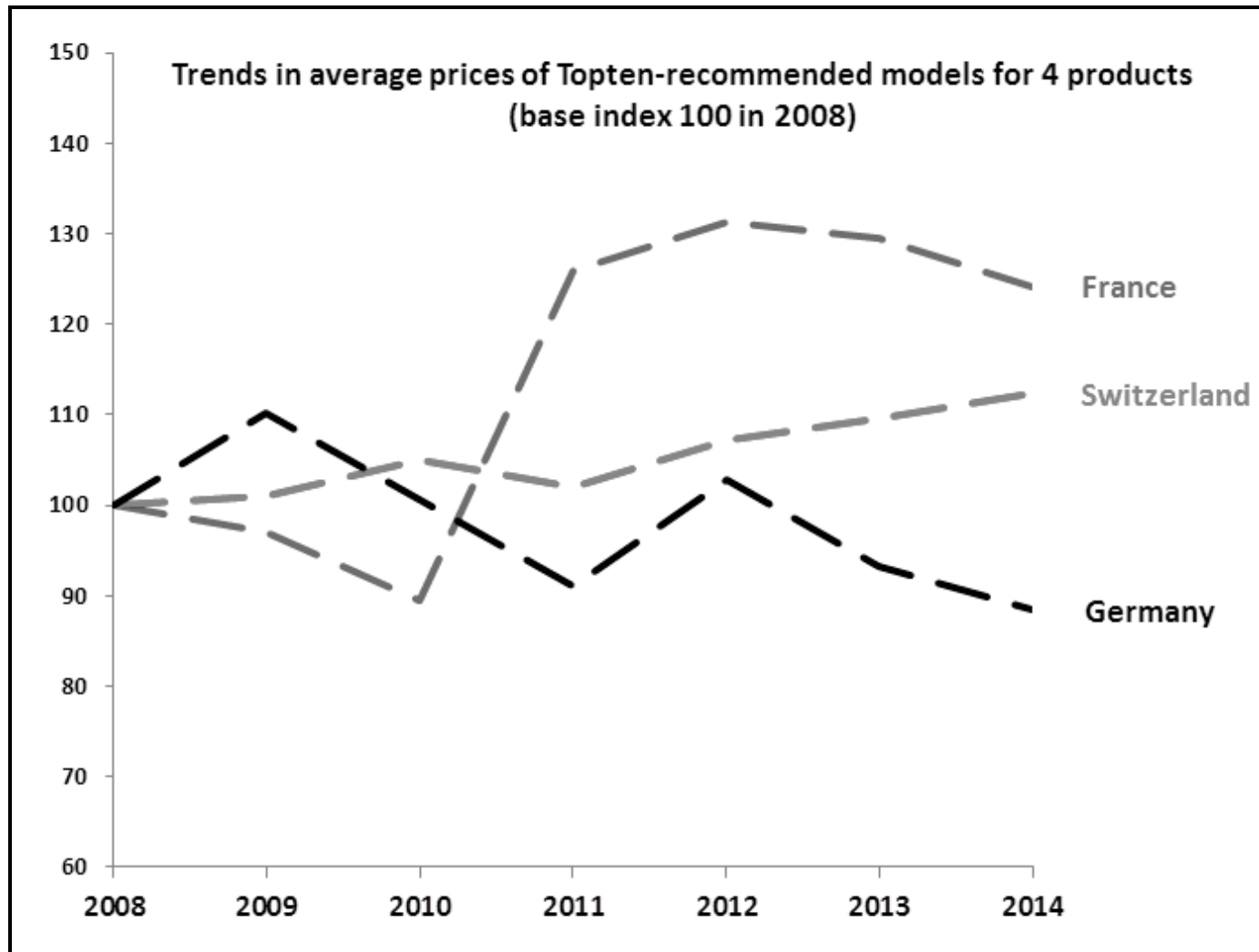
- Now that “easy” improvements have been made, are BAT products more or less affordable than before?

In the next slides, remember:

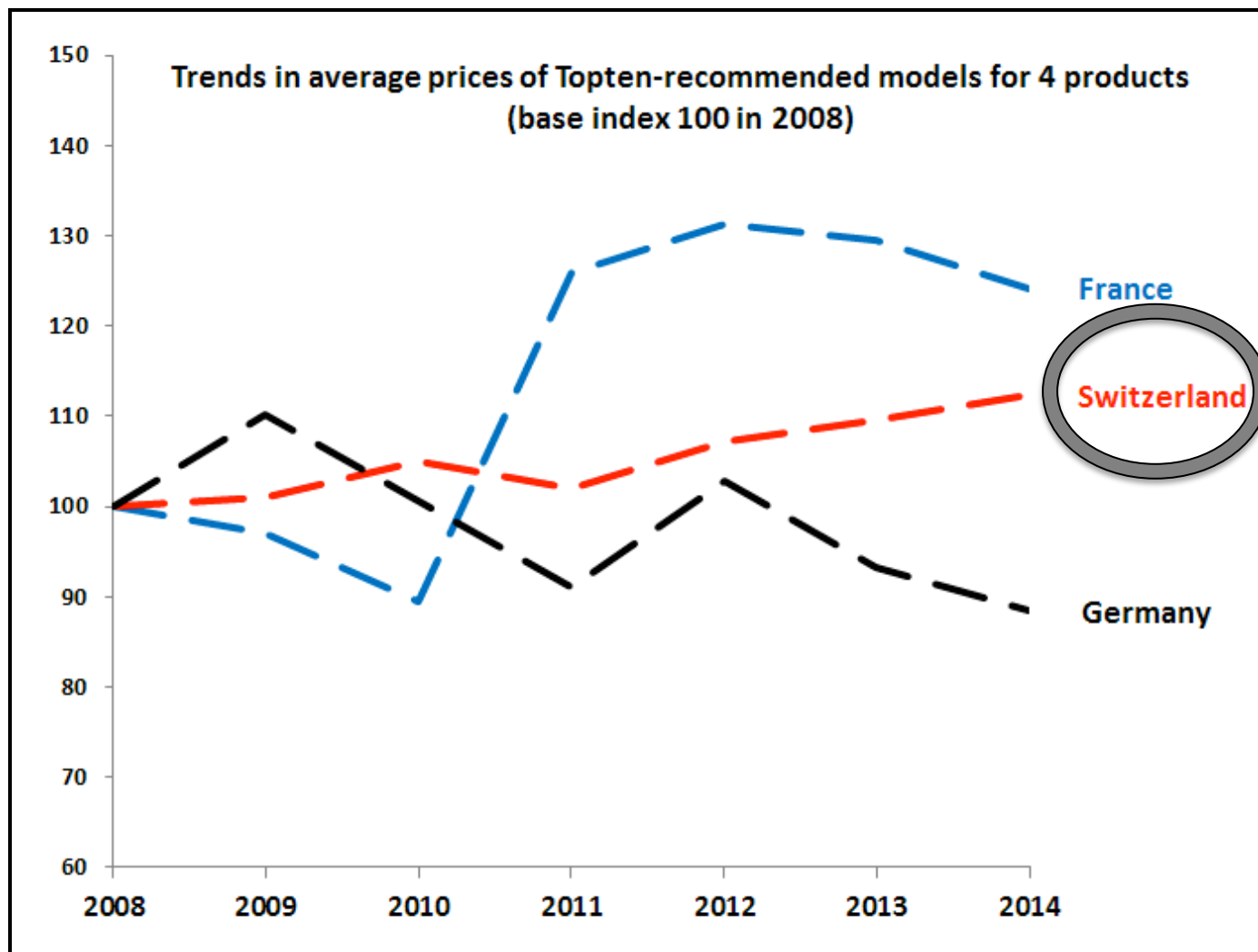
- Purchase price to be taken with caution! Only to show trends on annual evolution
- Average energy performance strongly increased: savings over the product life-time compensate the purchasing price increase



Findings on affordability aspects



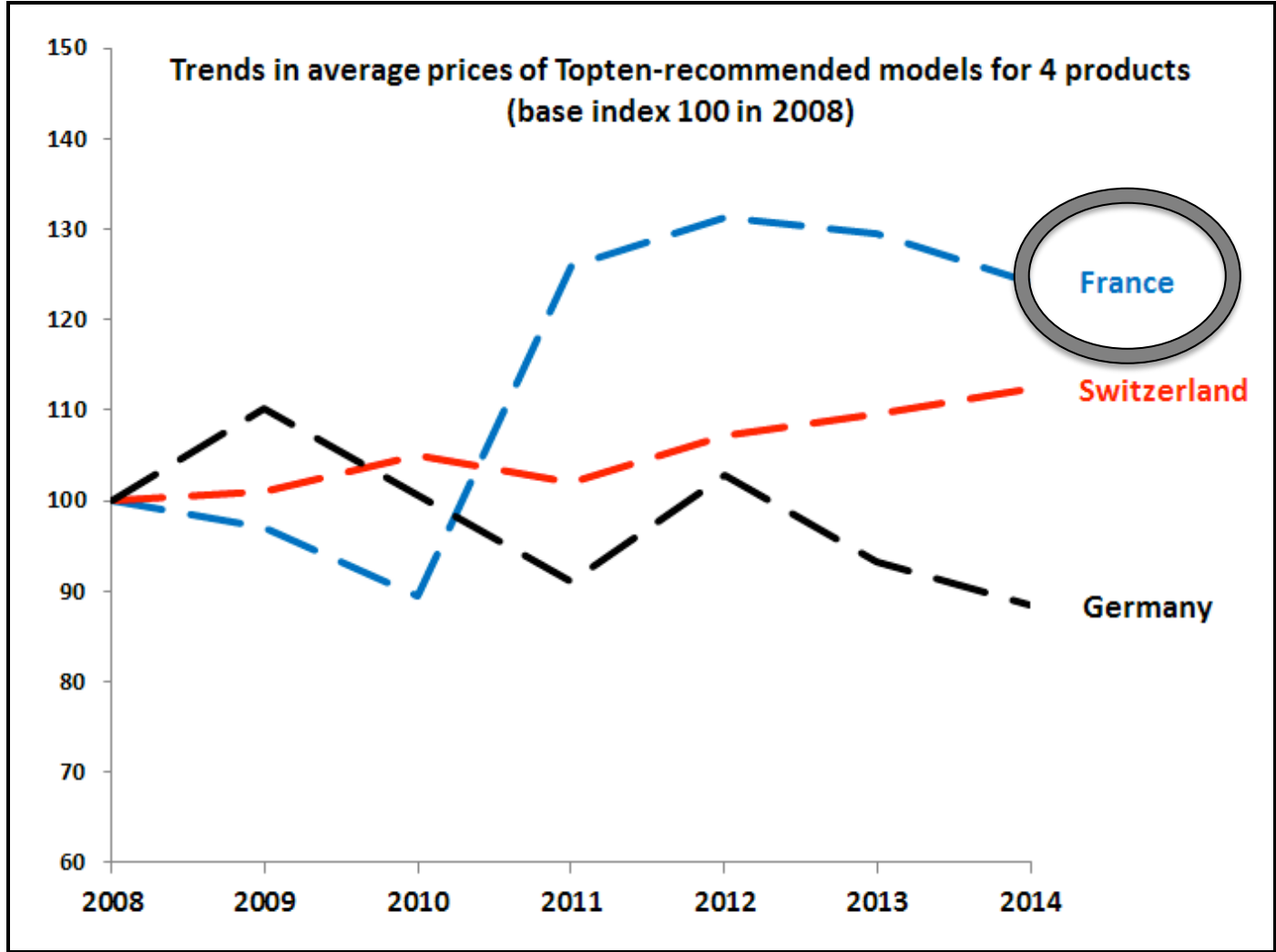
Findings on affordability aspects



Trend aligned on inflation (less than 2% per year)



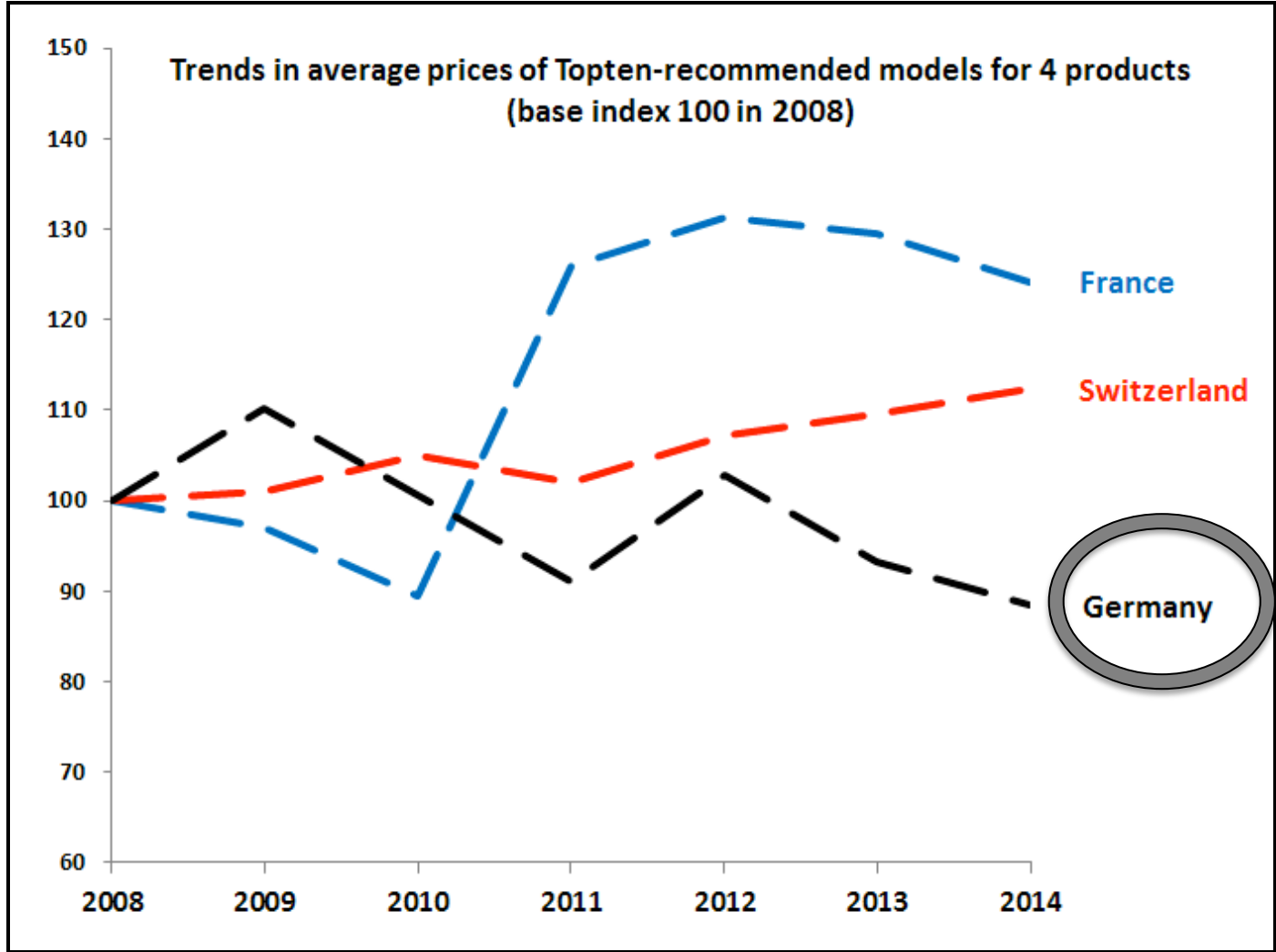
Findings on affordability aspects



Increase in the price premium (+25%)



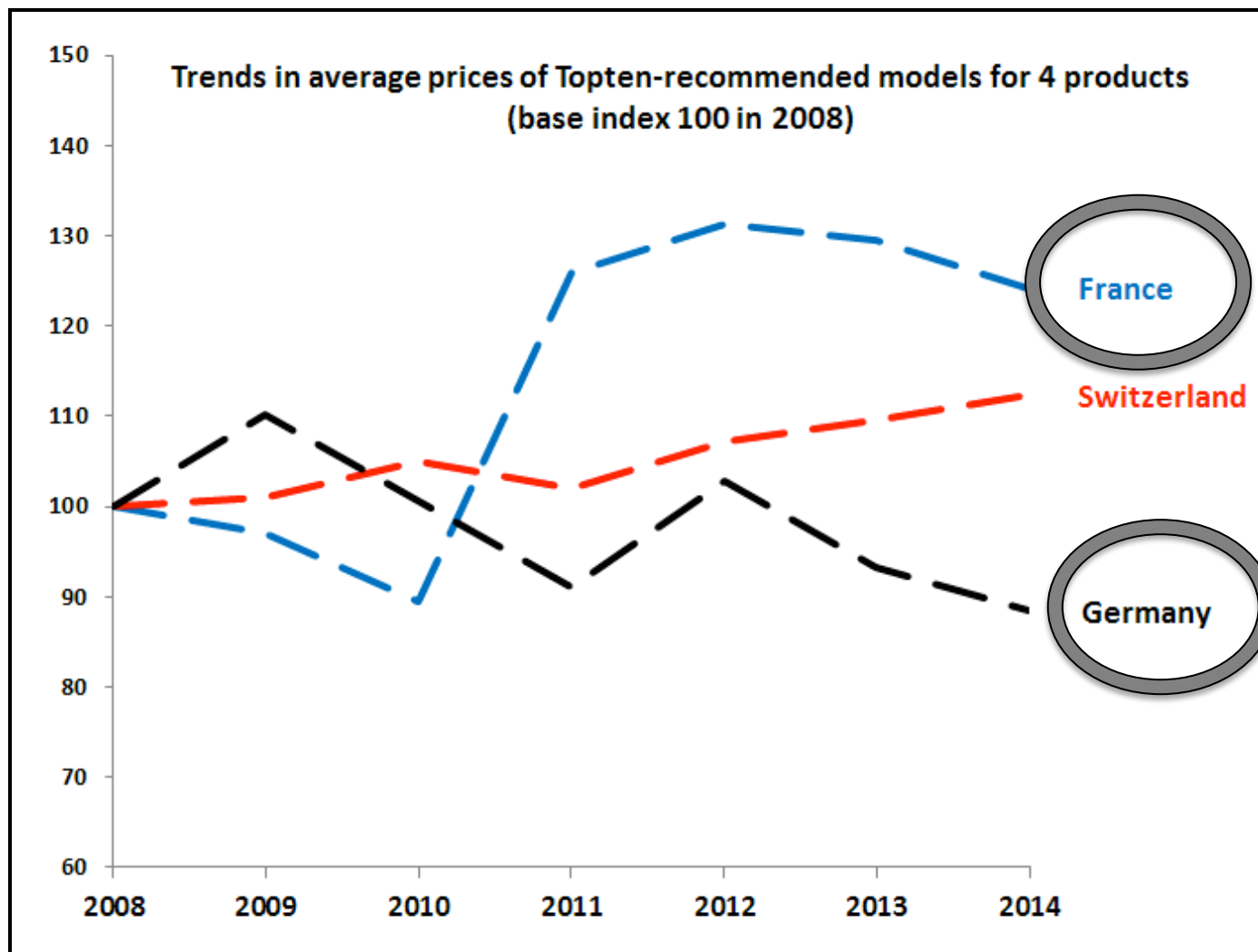
Findings on affordability aspects



Downward trend (-10%)



Findings on affordability aspects



Hypotheses:

- FR caught up, leading to a visible price premium
- DE Absolute prices higher, FR converged only in 2011
- BAT more popular in DE (sales A+++ : 23%, 5% in FR in 2013)



Conclusions and Recommendations

- Very substantial progress in energy performance of Top products (25 to 50% less energy consumption)
- Labels were successful in stimulating a steep improvement until 2012
- The following flatter trend suggests a strong need for revising labels with ambitious scales and more accurate estimates of technological potentials
- It still makes sense for a typical household to purchase BAT products compare to low-end ones (40% savings by choosing Topten models)
- True despite the improvements of the bottom of the market (Ecodesign)



Conclusions and Recommendations

- Full market upgrade in 7 years
- Contrasted information between countries regarding affordability of top efficient products → Further research to better identify the roots of these differences
- In a total cost perspective, Topten recommended products are more economical in 2014 than in 2008 → Reinforce consumer education on this topic



Thank you for your attention

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