



Regional Strategies & Initiatives in Energy Efficiency

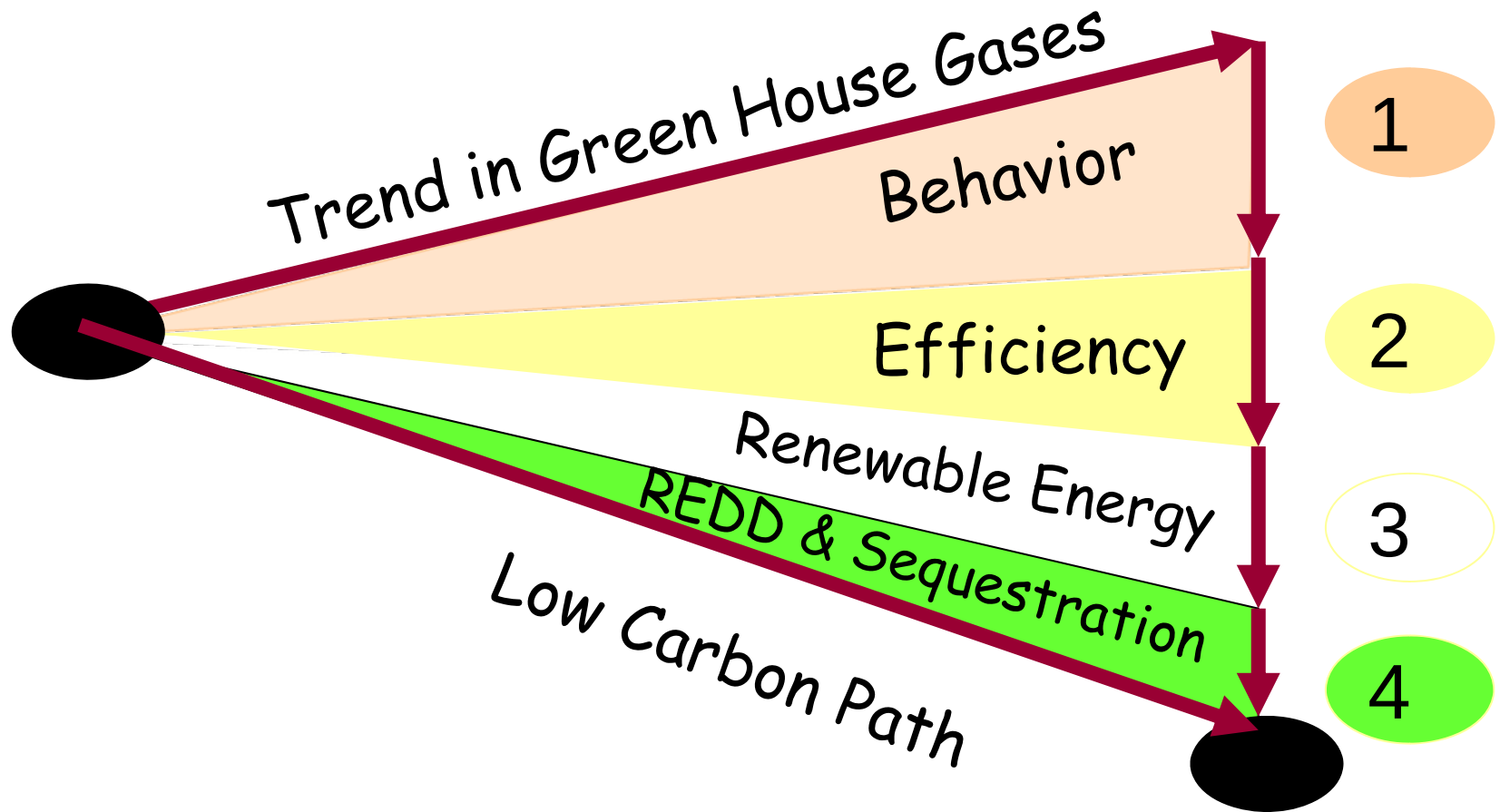
**“ENERGY EFFICIENCY: A STRATEGIC AGENDA
FOR GOVERNMENT AND INDUSTRY”**

Amman, November 9, 2009

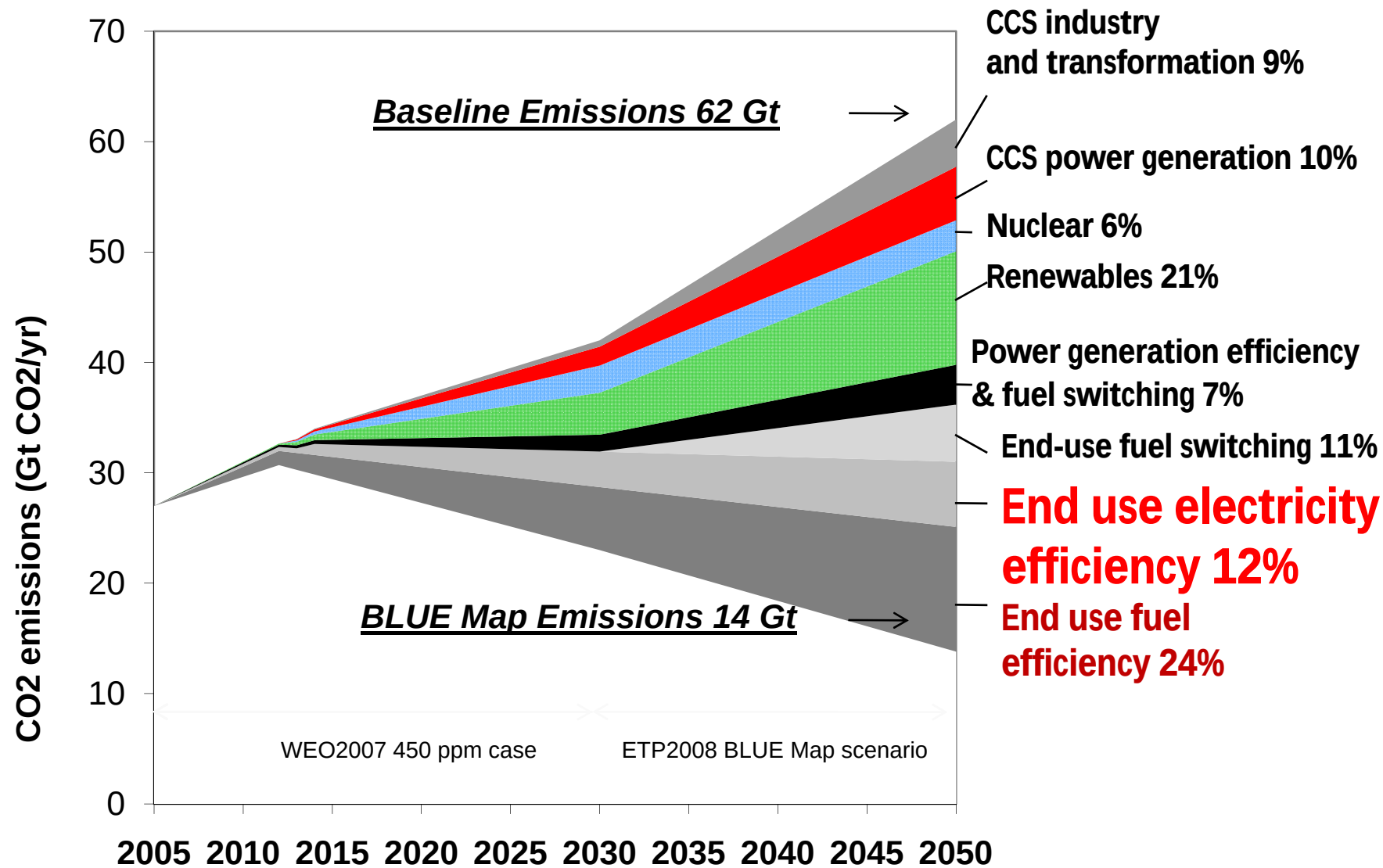
Benoit Lebot

UNDP Climate Change Advisor

Benoit.lebot@undp.org



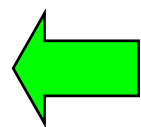
Contribution of Technology Wedges



How to transform markets?

% of Market

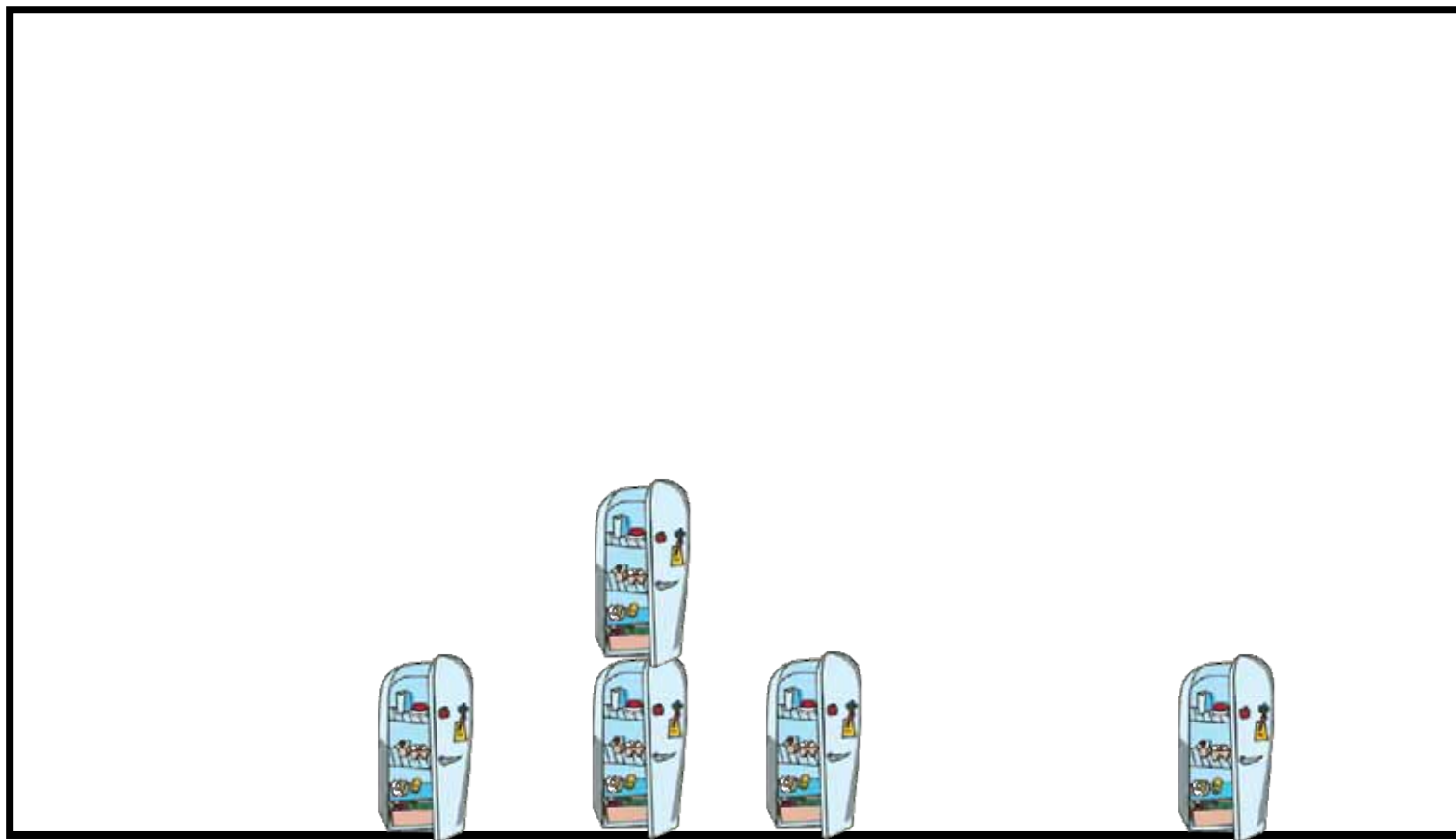
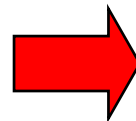
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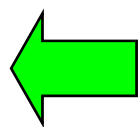
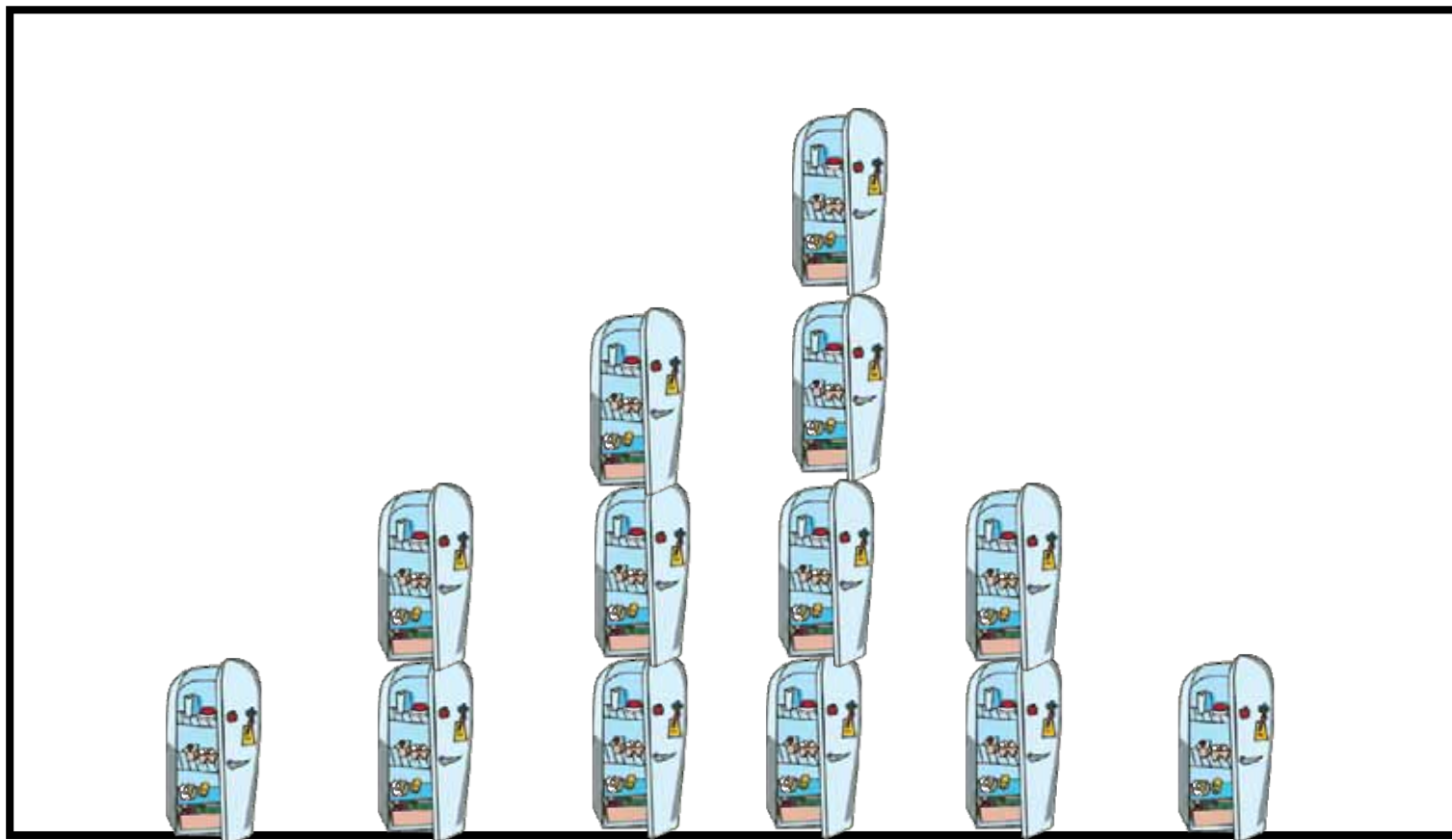
**Carbon Footprint
Index**

Higher



% of Market

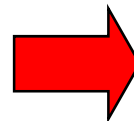
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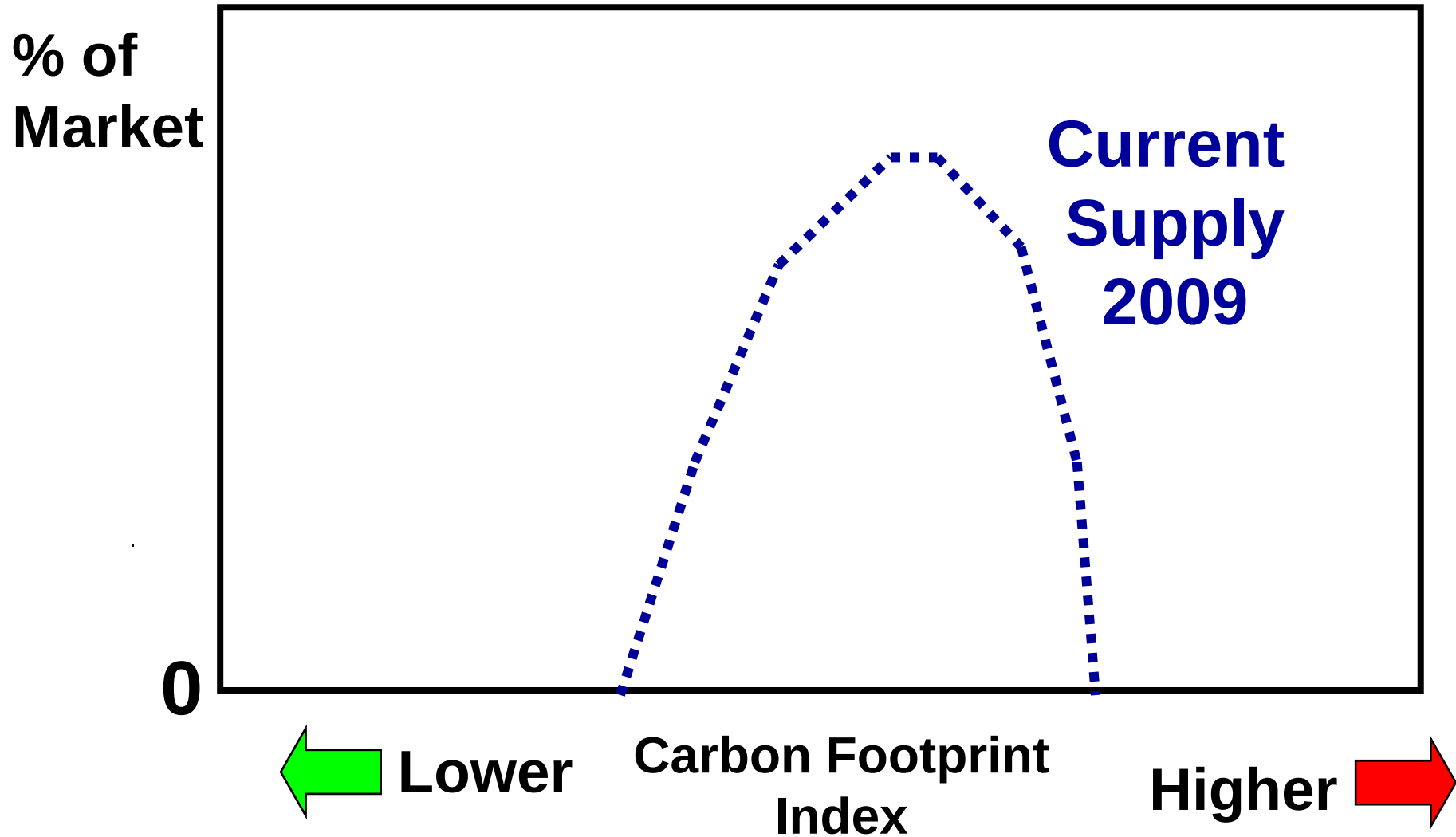


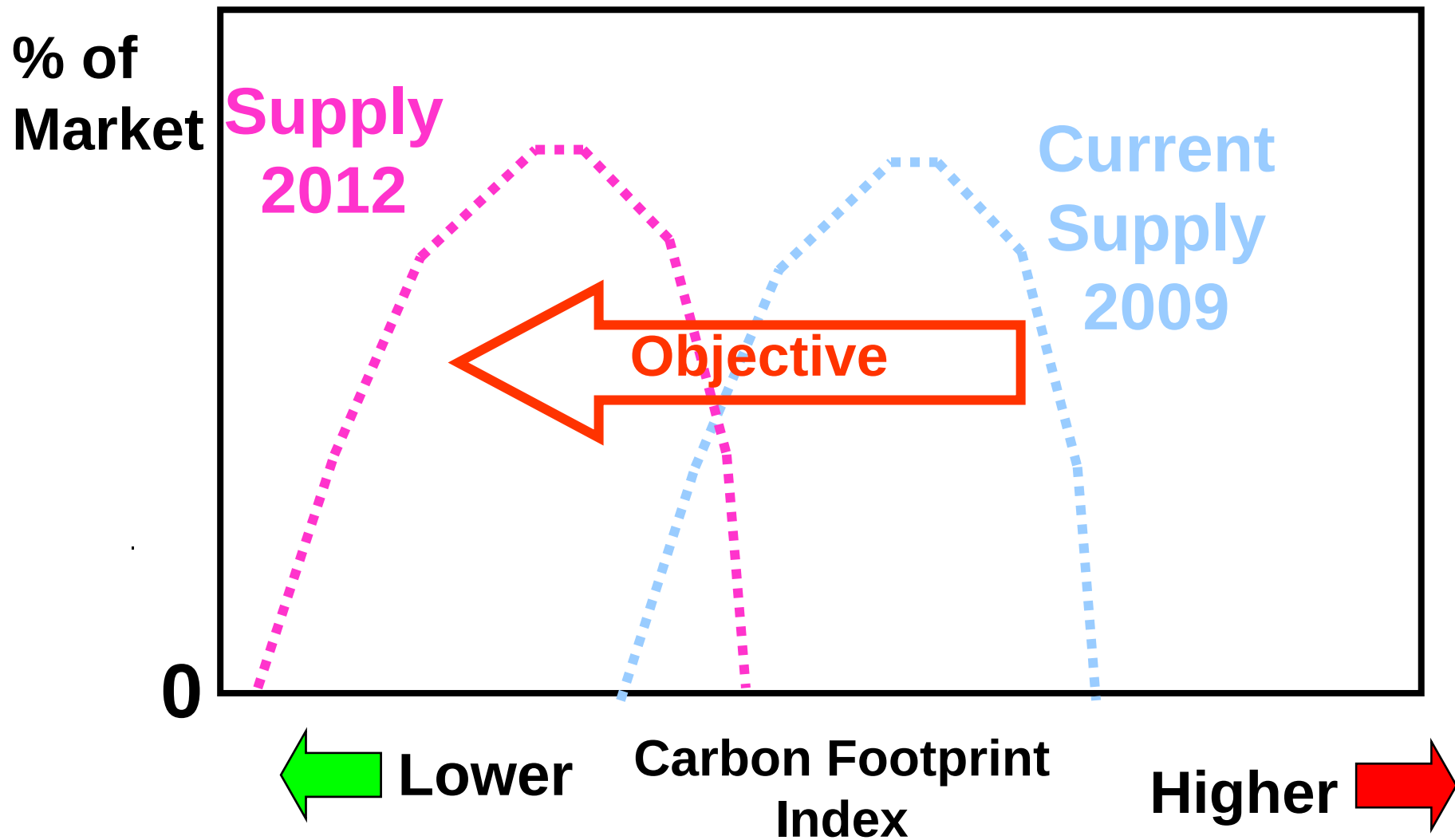
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**Carbon Footprint
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Higher

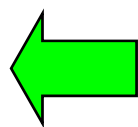






**% of
Market**

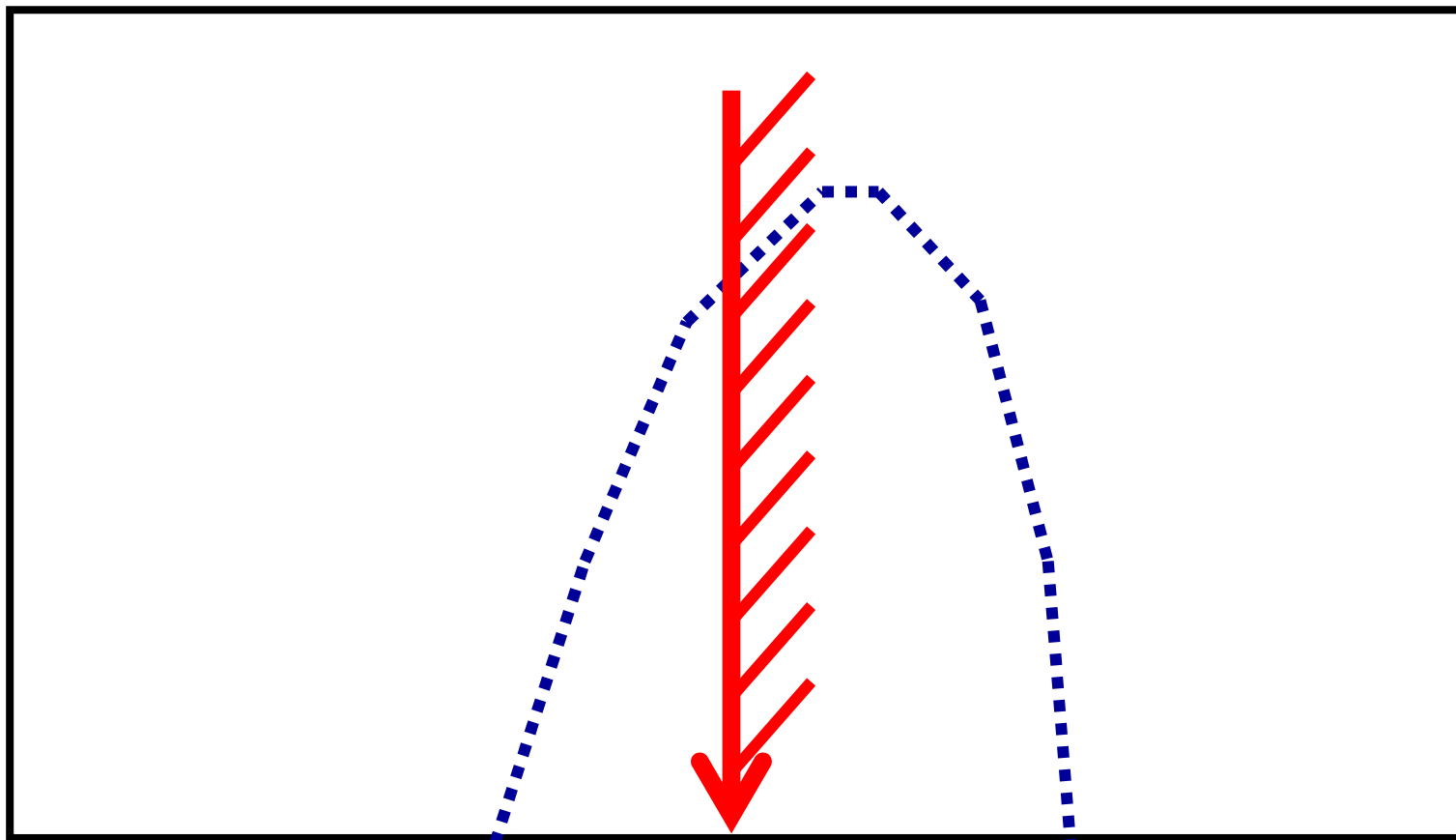
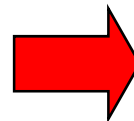
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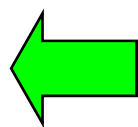
**Carbon Footprint
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Higher



**% of
Market**

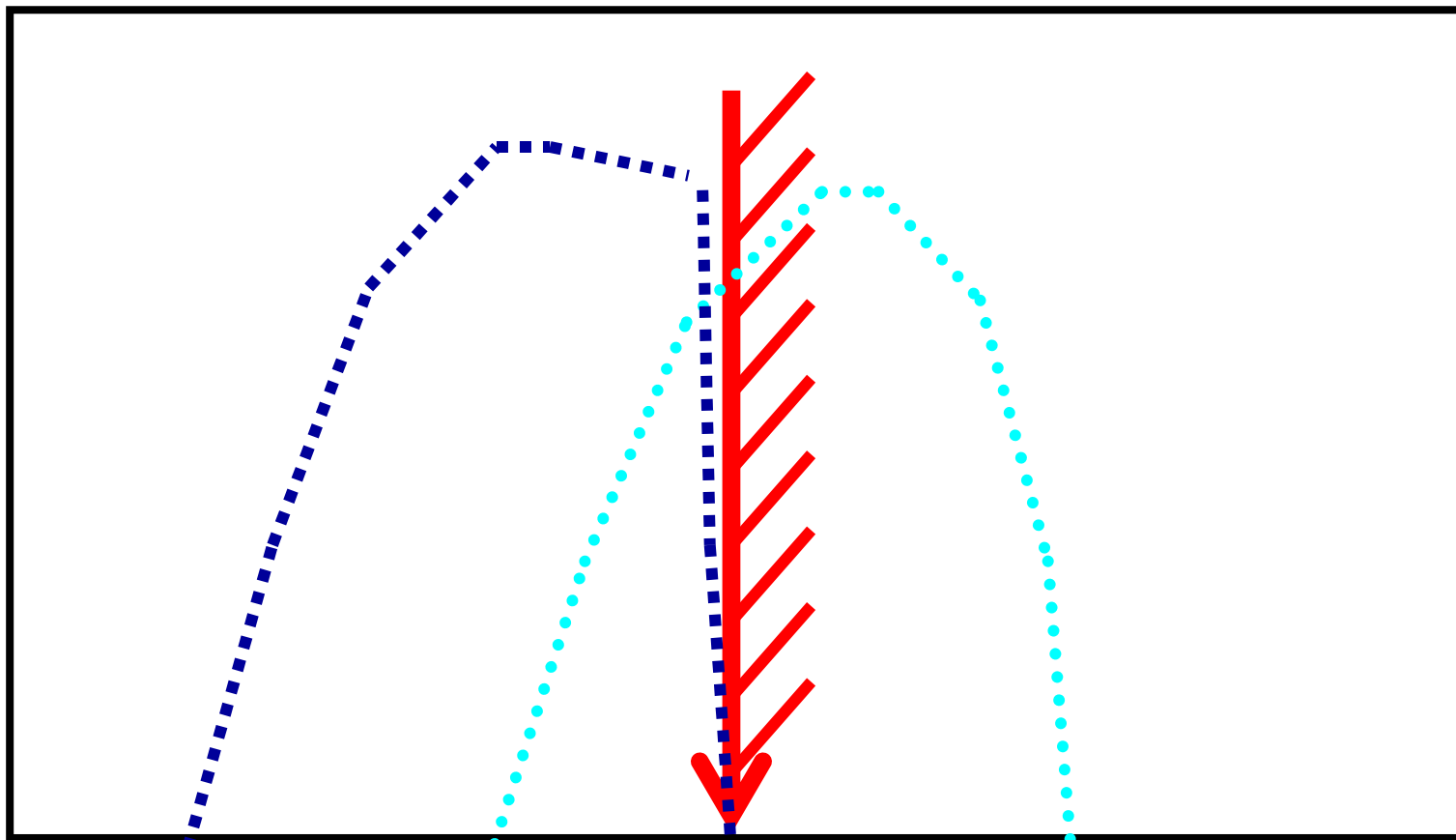
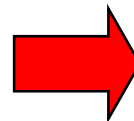
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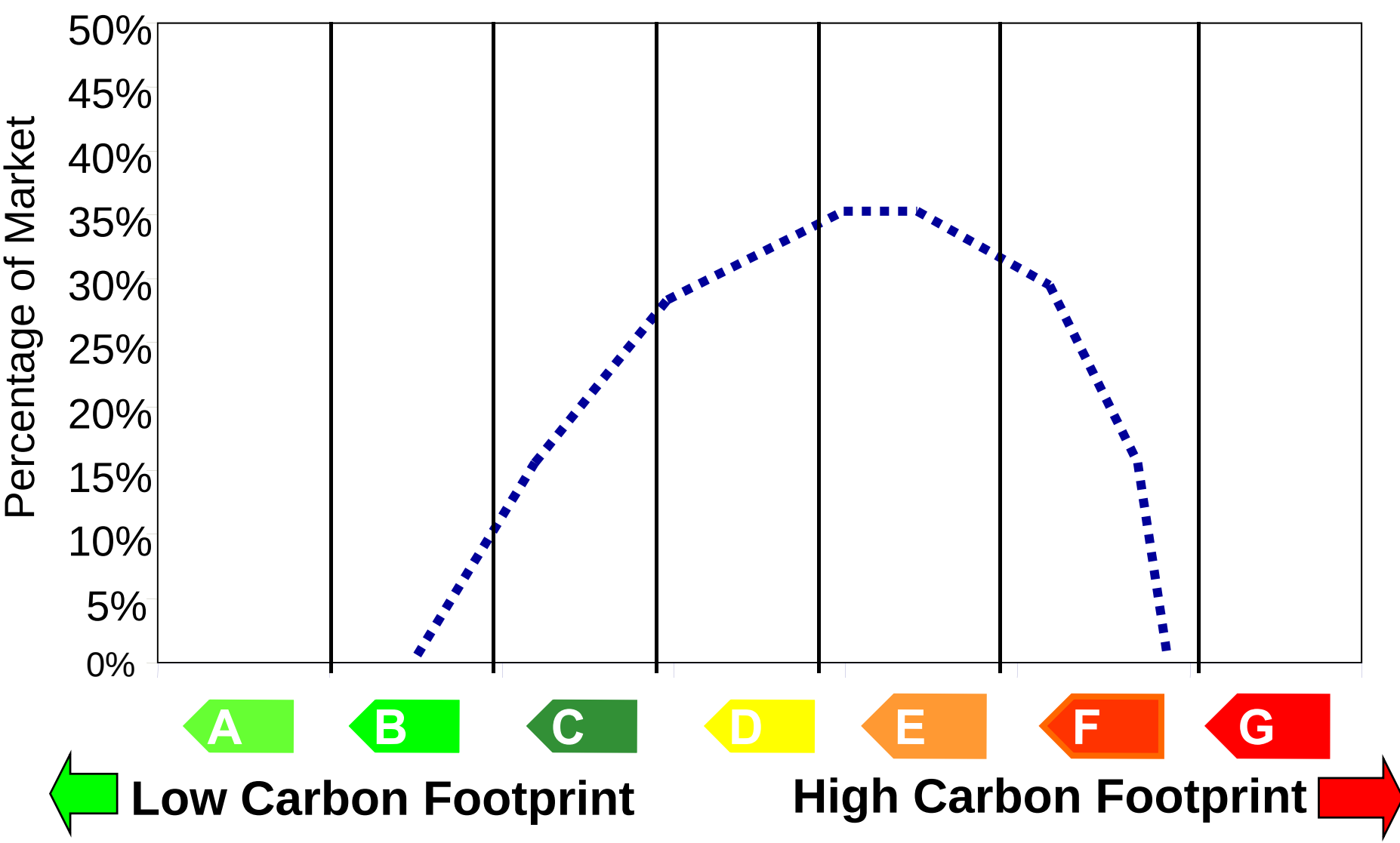
**Carbon Footprint
Index**

Higher



6 Steps to move towards a low carbon economy

- 1. Set Right Price Signal \$
- 2. Knowledge & understanding
- 3 .Rating & Benchmarking

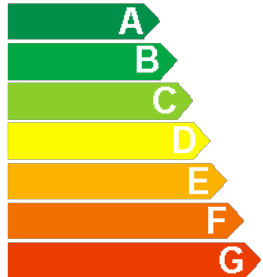


Energy

Manufacturer
Model

Logo
ABC
123

More efficient



B

Less efficient

Energy consumption kWh/year
(Based on standard test results for 24h)

350

Actual consumption will
depend on how the appliance is
used and where it is located

Fresh food volume l
Frozen food volume l

200
80



Noise
(dB(A)re 1 pW)

40

Further information is contained
in product brochures

Norm EN 153 May 1990
Refrigerator Label Directive 94/2/EC



Energy

Manufacturer
Model

More efficient

A

B

C

D

E

F

G

Less efficient

Energy consumption kWh/year
(Based on standard test results for 24h)

Actual consumption will depend on how the appliance is used and where it is located

Fresh food volume l
Frozen food volume l

Noise
(dB(A)re 1 pW)

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Norm EN 153 May 1990
Refrigerator Label Directive 94/2/EC



+

Logo
ABC
123

B

350

200
80

* ** ** *

40

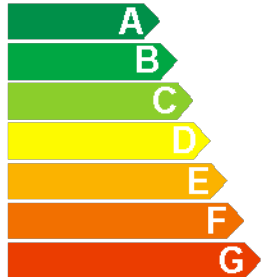
=

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Model

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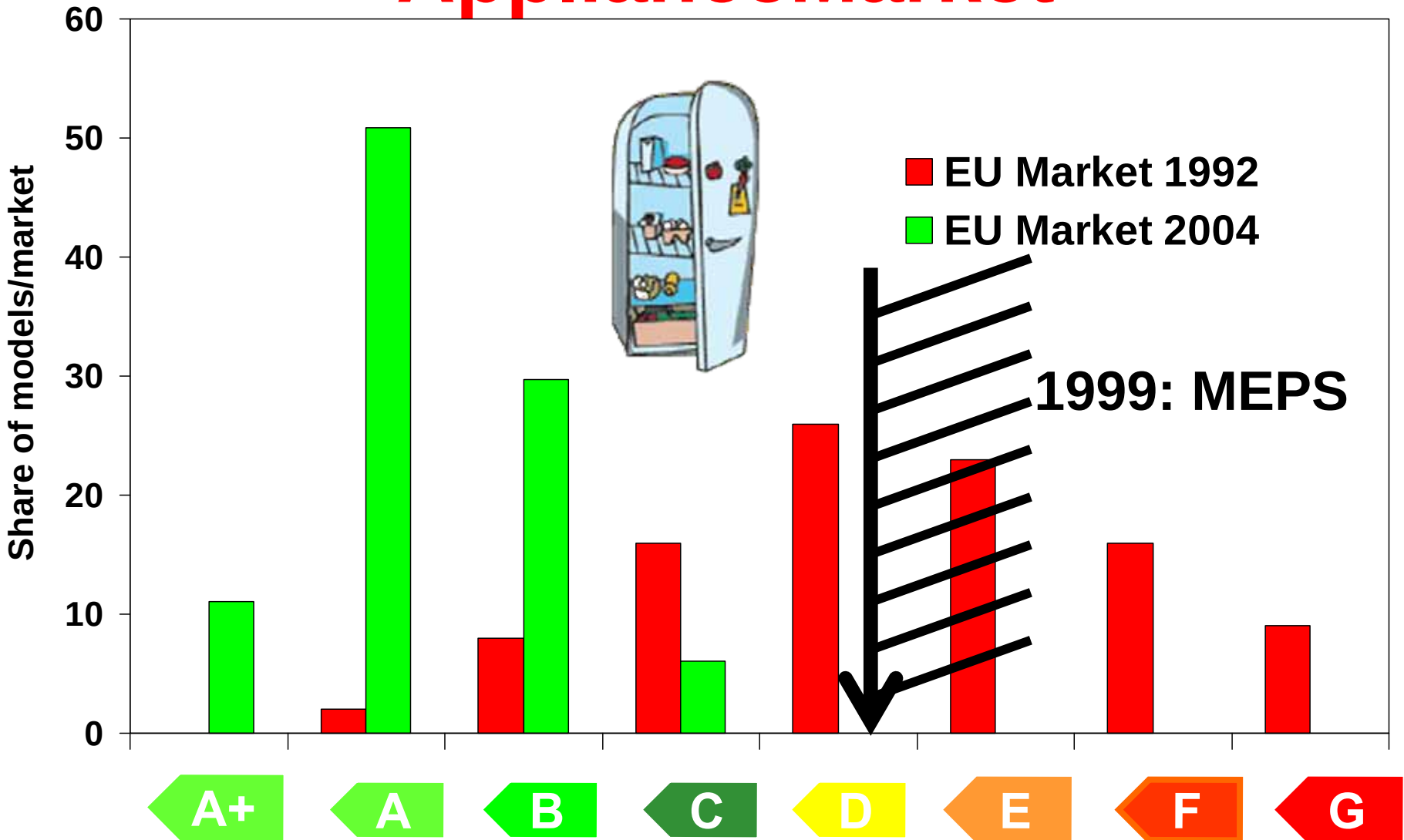
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Norm EN 153 May 1990
Refrigerator Label Directive 94/2/EC



Impact of EU Label on Cold ApplianceMarket



European Car Labelling



Energie

Fabrikant

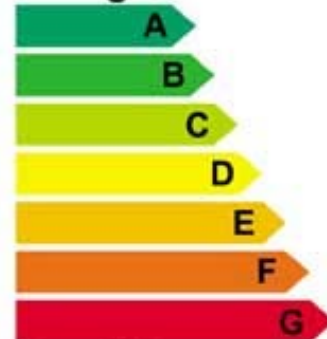
Model

Brandstof

Brandstofverbruik

gemeten volgens de test van de typegoedkeuring.

Zuinig



Onzuinig

CO₂-uitstoot

CO₂ is het broeikasgas dat bij de wereldwijde klimaatverandering de belangrijkste rol speelt.

Jaar van toepassing

Een gids betreffende het brandstofverbruik en de CO₂-uitstoot met gegevens voor alle nieuwe modellen personenauto's is gratis verkrijgbaar in elk verkooppunt.

Naast de brandstofefficiëntie van een auto zijn ook het rijgedrag en andere, niet-technische factoren bepalend voor het brandstofverbruik en de CO₂-uitstoot van een auto.

Richtlijn 1999/94/EG: Etikettering personenauto's

Personenauto

Merk X

Model Y

3-drs hatchback

handschakeling

Benzine

7,2 liter / 100 km
= 1 liter op 13,9 km



173 gram / km

2001

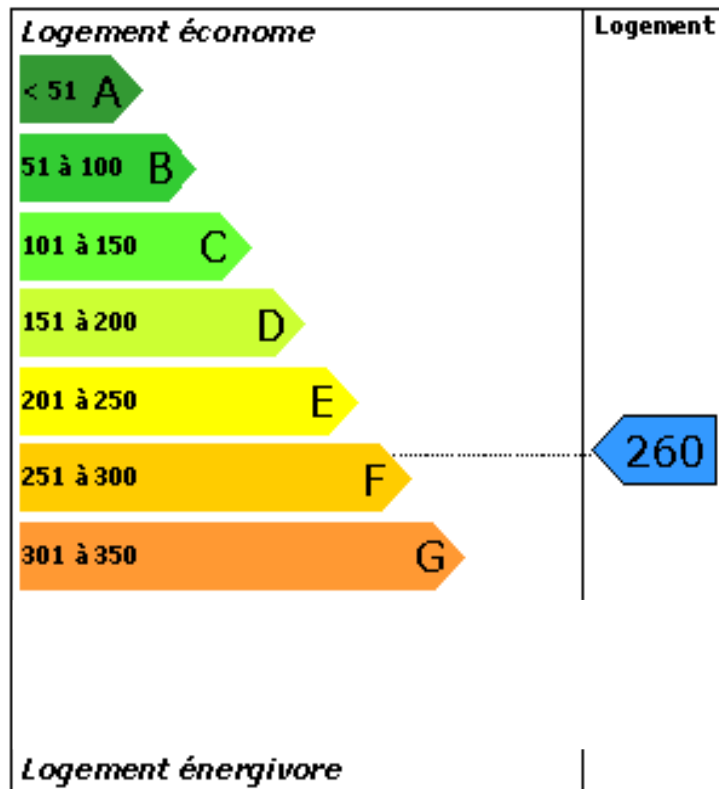
Energy & Carbon Labeling for Buildings

Indicateurs environnementaux (pour le chauffage et l'eau chaude sanitaire)

Consommations énergétiques (en énergie primaire)

Consommation conventionnelle : **260**

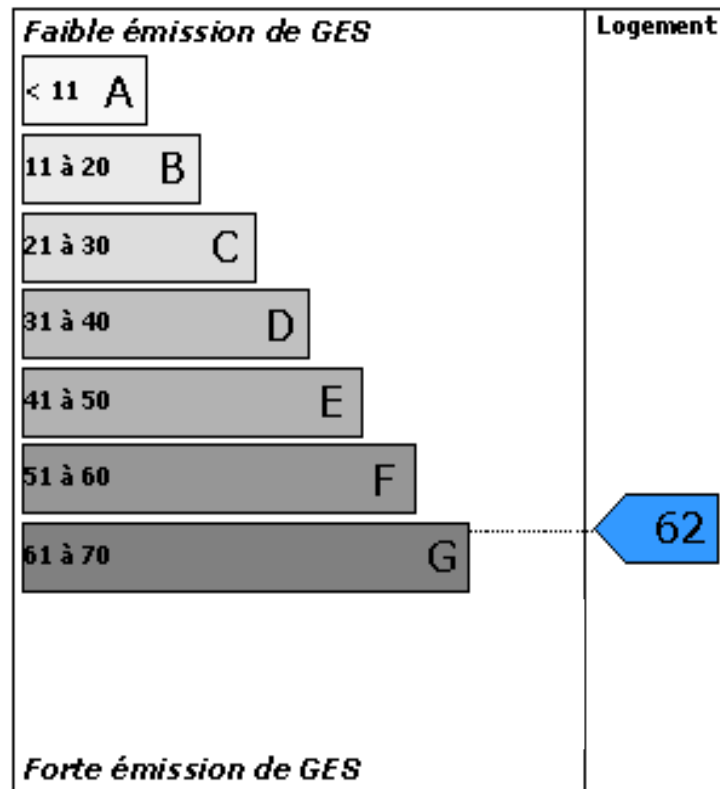
Consommation réelle : **-**



Estimation du montant annuel des
frais inhérents à la consommation : **1233 €**

Emissions de gaz à effet de serre (GES) liées au fonctionnement du logement occupé

62 kg $\text{CO}_2/\text{m}^2\cdot\text{an}$

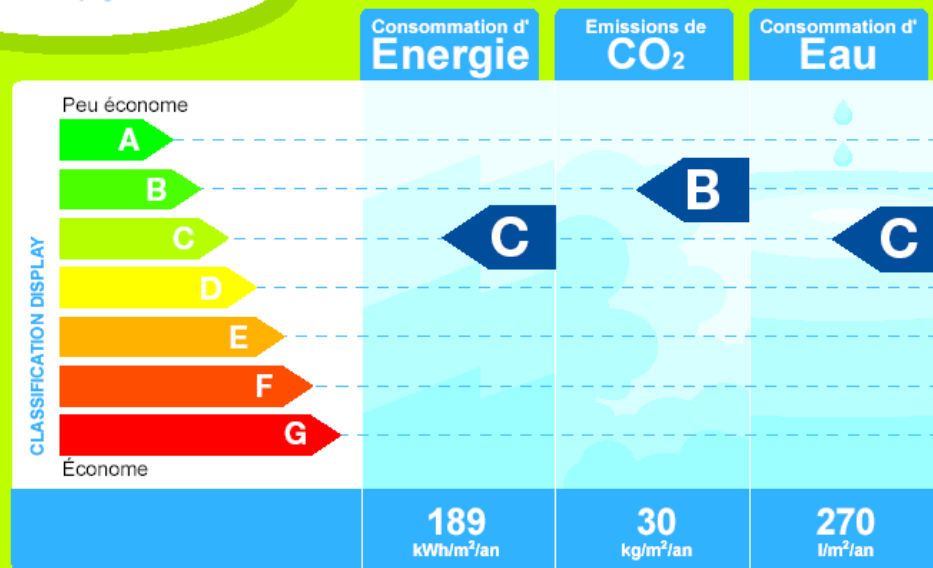




Energie-Cités' European
Municipal Buildings
Climate Campaign

Ecole CLOTEAUX

Ce bâtiment est-il performant ?



Faire progresser ce bâtiment vers la classe A

Des gestes simples

Maîtrisons l'énergie, l'eau et préservons l'environnement :

- En éteignant la lumière quand on quitte une pièce
- En fermant les portes et les fenêtres dès que possible...

Vous pouvez ainsi réduire de 10% voire plus les consommations de ce bâtiment

Des solutions techniques

- A été adopté un système électronique sur la chaudière réduisant ses consommations en gaz
- En 2004, installation d'économiseurs d'eau dans les sanitaires
- D'ici la fin 2004, rénovation du système d'éclairage intérieur et extérieur

En gagnant une classe, on éviterait par an

La consommation d'énergie de	Les émissions de CO ₂ de	La consommation d'eau de
5 maisons individuelles	4 tours du monde en voiture	9320 douches

Energies utilisées



72%
Fossile



24%
Nucléaire



4%
Renouvelables

www.display-campaign.org

Pour plus d'information :

Ville de Rennes
Service Energie / Jean Marc Berthet
Tél. : 02 99 28 57 80
e-mail : jmberthet@ville-rennes.fr
www.ville-rennes.fr

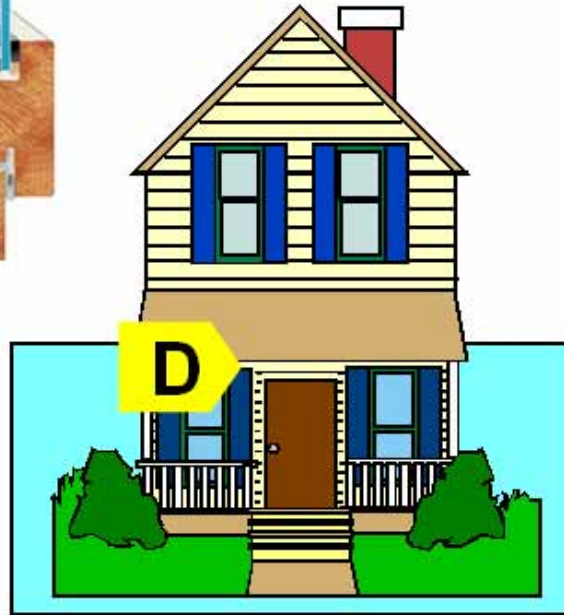


Site officiel :

www.display-campaign.org

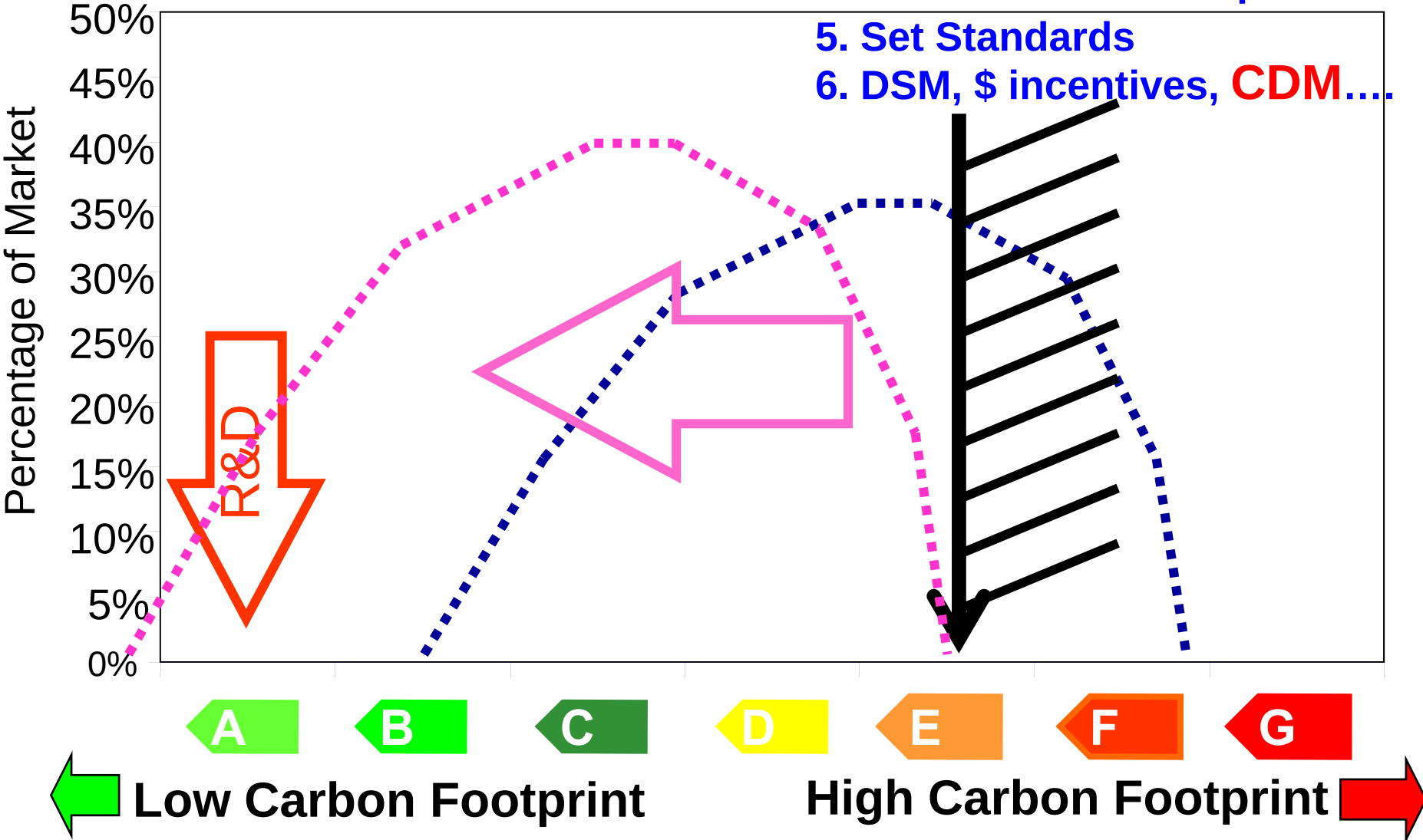


Rating, Labeling, Benchmarking apply to a large number of markets



6 Steps to move towards a low carbon economy

- 1. Set Right Price Signal \$
- 2. Knowledge & understanding
- 3. Rating & Benchmarking
- 4. Research & Development
- 5. Set Standards
- 6. DSM, \$ incentives, **CDM**....



Potential Benefits of International Cooperation on Energy Efficiency (1)

- **Contribute to a Greater Market Transparency around the globe**
- **Reduced Costs for the Testing & Design of energy system & equipment**
- **Enhanced Prospects for Trade & Technology Transfer**
- **Reduced Cost for developing Government & Utility Efficiency Programs, as well as specific ODAs**

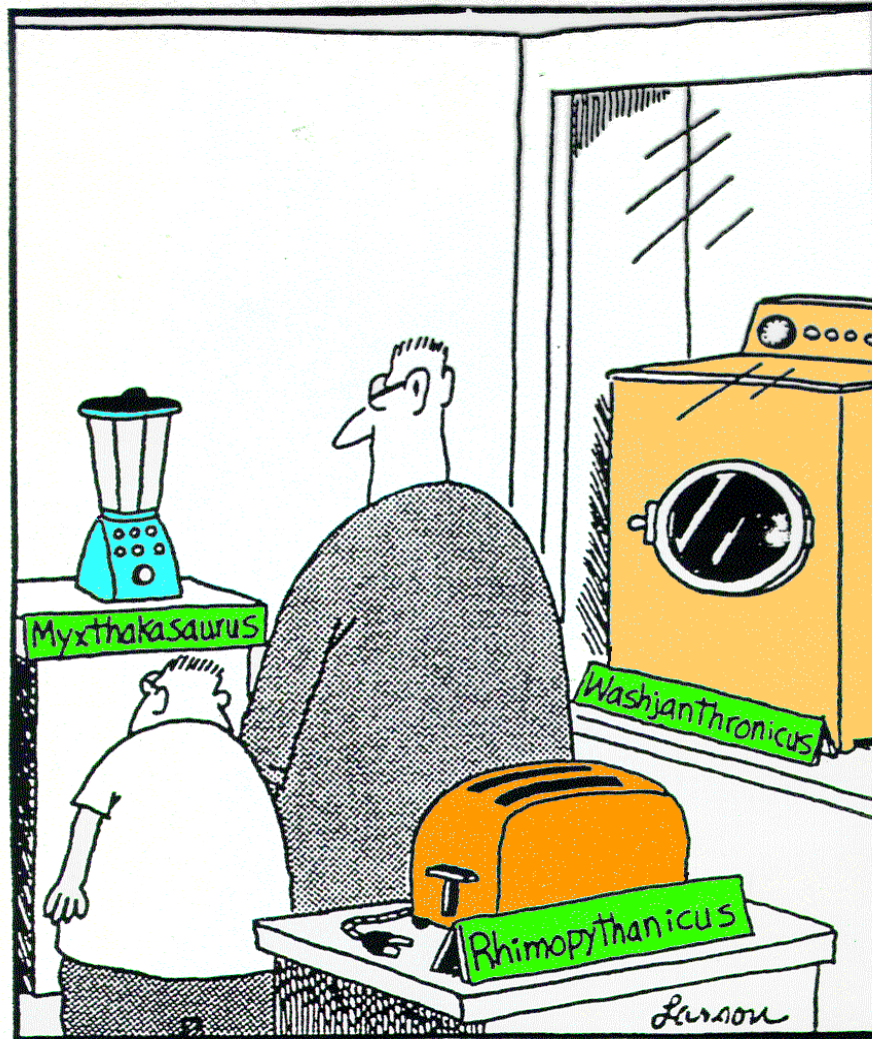
Potential Benefits of International Cooperation on Energy Efficiency (2)

- Prevent dumping of inefficient technologies in the least developed countries
- Facilitate CDM and Kyoto Flexible Mechanisms deliver energy efficiency
- Improve compliance
- Energy Standards & Labels for Traded Goods: a highly visible example & a concrete field for International Cooperation: **Energy Charter** to lead?

UNDP's Way Forward to Promote Energy Efficiency

- Put in Place Relevant **Policy Framework** (Energy Price Reform, EE legislation, Adequate institution)
- **Combine** ODA (typically GEF) Support & **Sequence** with Market Based Mechanisms (typically Carbon Finance)

Inefficient Products to Museum



In Jordan
&
All over
the World!

Chukran !

Benoit.lebot@undp.org