

# Power Labelling is a Fiction

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# ELECTRICITY LABEL

**Product:** Product name  
**Supplier:** Supplier's name  
**Phone:** 0800 - xxxx xxxx  
**Website:** www.supplier-website.com

## Monthly electricity cost

For an annual consumption of	<b>1.600 kWh</b> e.g. single-household	<b>2.500 kWh</b> e.g. two-person-household	<b>4.000 kWh</b> e.g. four-person-household
your monthly electricity bill is (Prices as of: 01.01.02)	<b>23,20 €</b>	<b>33,30 €</b>	<b>50,30 €</b>

final prices incl. VAT

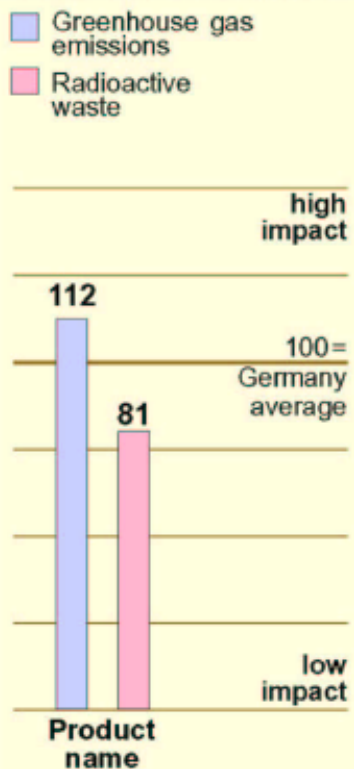
Minimum contract period: 3 months

## Fuel mix

Your electricity is generated from the following fuel sources (percent):

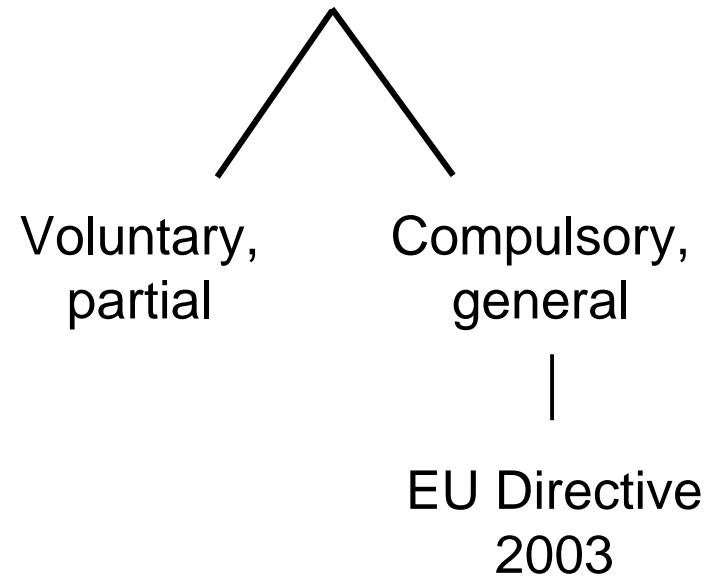
	Product name (2002)	for comparison: Germany average (2001)
<b>Coal</b>	<b>61,0%</b>	<b>51,1%</b>
<b>Nuclear</b>	<b>25,0%</b>	<b>31,0%</b>
<b>Natural gas</b>	<b>4,5%</b>	<b>7,0%</b>
<b>Renewable energy</b>	<b>8,5%</b>	<b>7,5%</b>
<i>of which</i>		
Hydroelectric	4,5%	3,5%
Wind	3,2%	3,2%
Biomass	0,8%	0,8%
Solar	<0,1%	<0,1%
Other renewable	<0,1%	<0,1%
<b>Other energy sources</b>	<b>1,0%</b>	<b>3,4%</b>

## Environmental impact



# What is power labelling?

(Electricity information disclosure)



Source: Timpe, C.: Öko-Institut e.V.

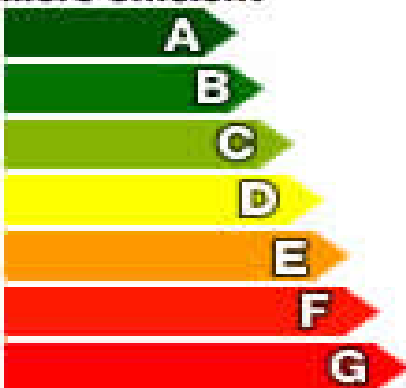
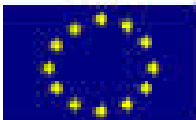
# Why power labelling?

- “Consumer protection”
- “Stimulate sustainable generation”
- “Competition”

# Outline

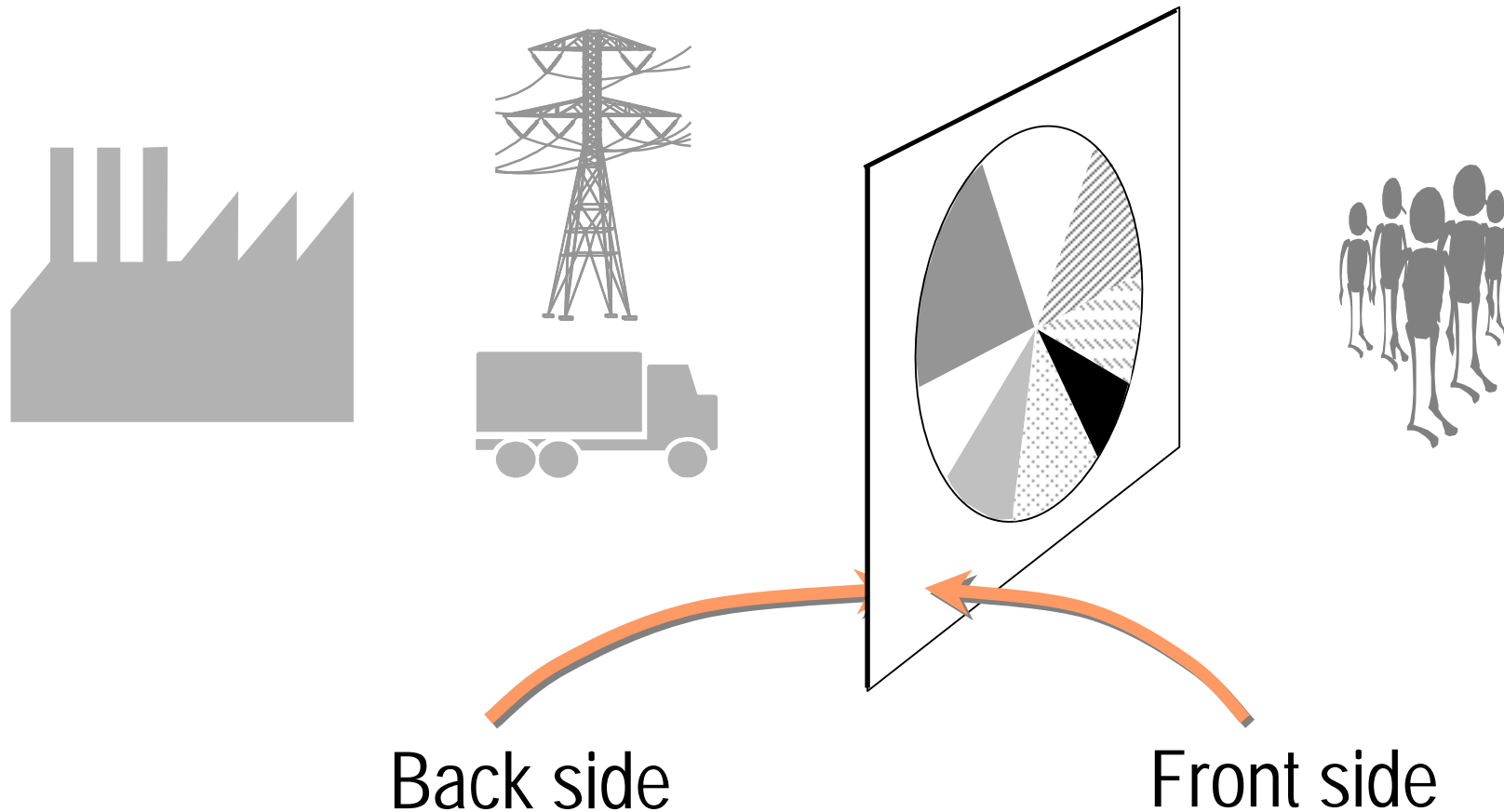
- What is power labelling
- Appendix: Check justification

# Conventional product labelling

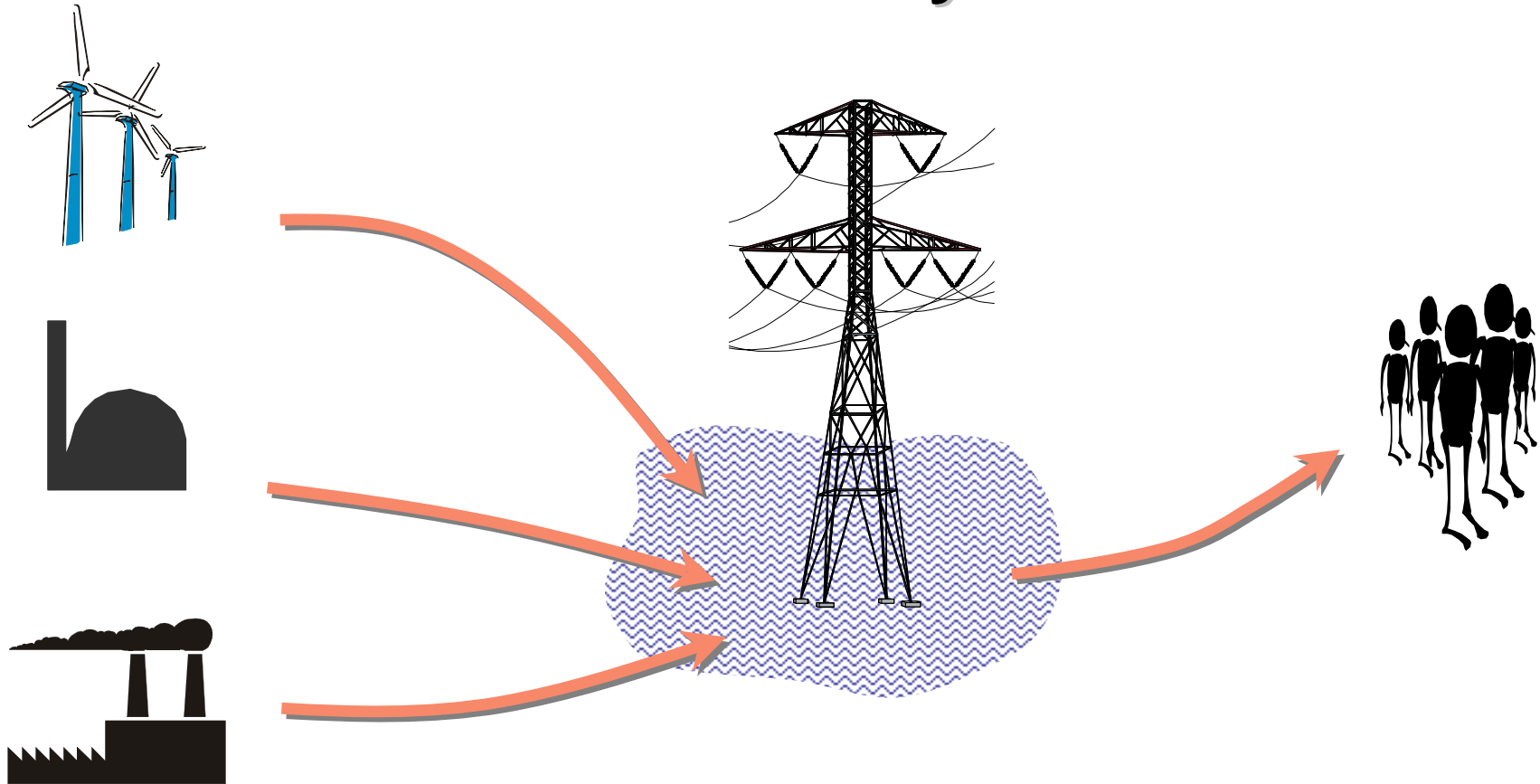
<b>Energy</b>		Washing machine
Manufacturer Model		
<b>More efficient</b> 		<b>A</b>
<b>Less efficient</b>		
<b>Energy consumption</b> kWh/cycle <small>Based on standard load washing at 60°C normal cycle</small> <small>Actual energy consumption will depend on how the appliance is used</small>		<b>1.55</b>
<b>Washing performance</b> <small>A higher G lower</small>		<b>A B C D E F G</b>
<b>Spin drying performance</b> <small>A higher G lower</small> Spin speed (rpm)		<b>A B C D E F G</b> 1400
Capacity (cotton) kg Water consumption		5.0 5.5
<b>Noise</b> (dB(A) re 1 pW)		Washing 5.2 Spinning 7.6
<small>Further information is contained in product brochures</small>		
<small>New EU label            Labeling restricted by 2.1 Mark and Simon</small>		

Source: www.themovechannel.com

# Product labelling



# Electricity



Heterogeneous good  $\longrightarrow$  Homogeneous good

# Differentiation strategies in power

Good itself

Production type

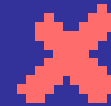
Contract

Customer service

Bundle sales

Seller

No

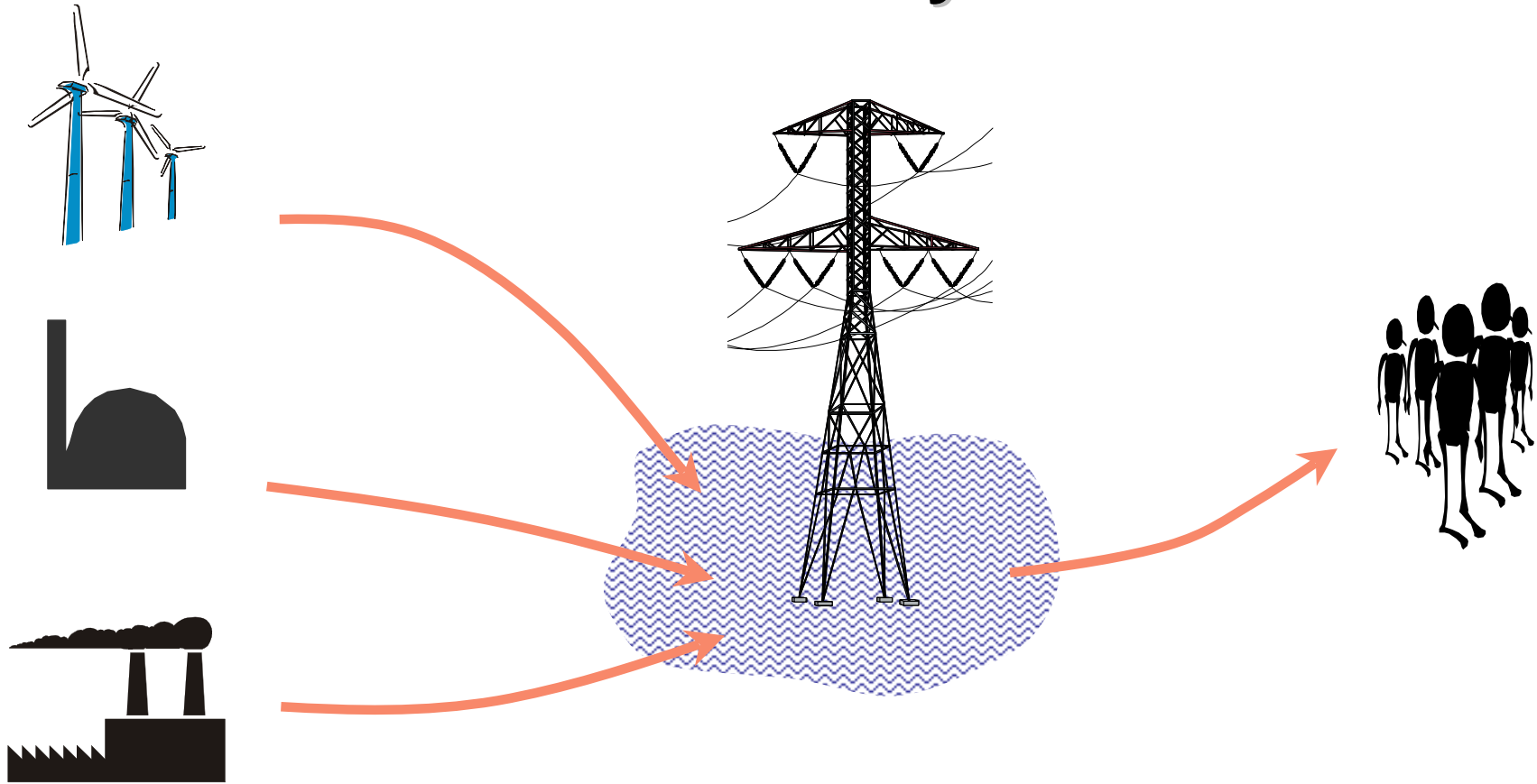




# Power labelling compared

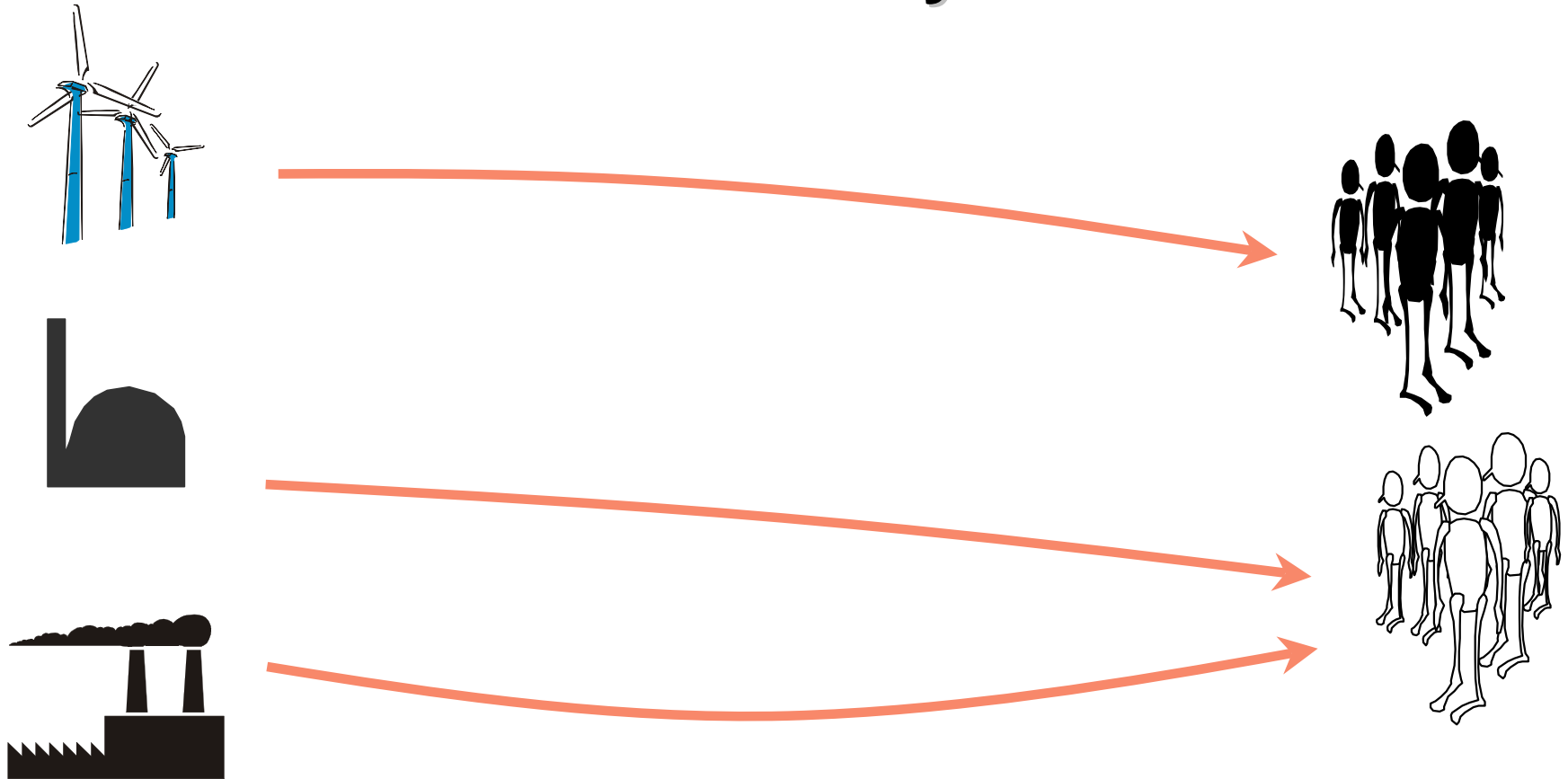
A	Information exclusively about external effect	Common
B	Negative information	Common
C	Obligation	Common
A+B+C		Not common

# Electricity



Heterogeneous good  $\longrightarrow$  Homogeneous good

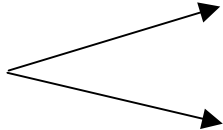
# Electricity



**Fiction!**

Heterogeneous good  $\longrightarrow$  *Heterogeneous good*

# Methods of linking withdrawals to injections (Tracking methods)

- Geographical
  - Vertically integrated
  - Estimates / UCTE mix
  - Selling company's policy
  - % revenue, % benefit
  - Investment schedules
  - Same quantities 
- Contract based
- Tradable certificates

# Power labelling design summary

## Back side

Linking method

Contract  
based vs. tradable  
certificates

Verification

## Front side

Information to be  
displayed

Ex post vs. ex ante

Portfolio vs. product

# Conclusion

- Stronger than conventional labelling
- Market design affected

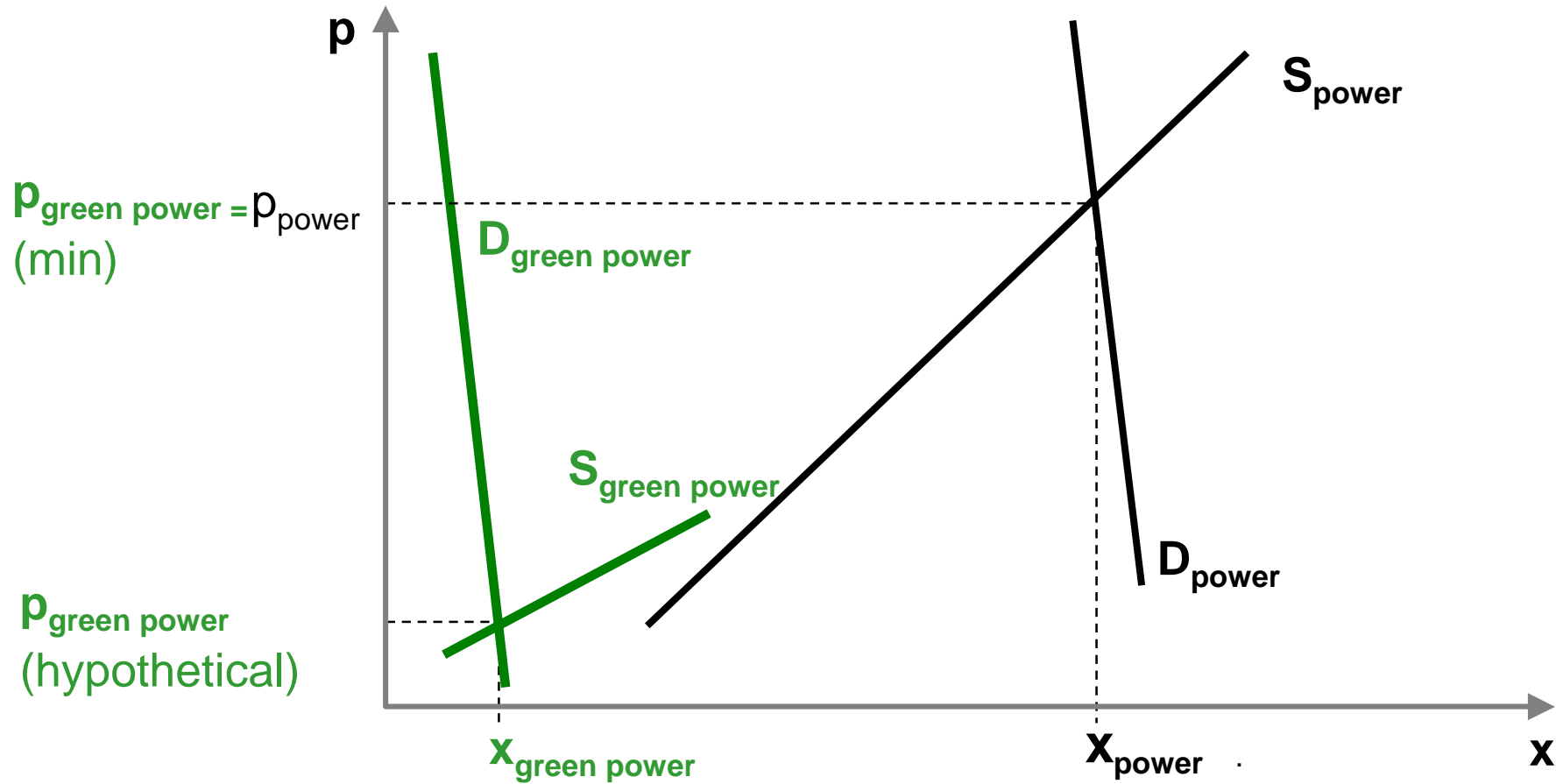
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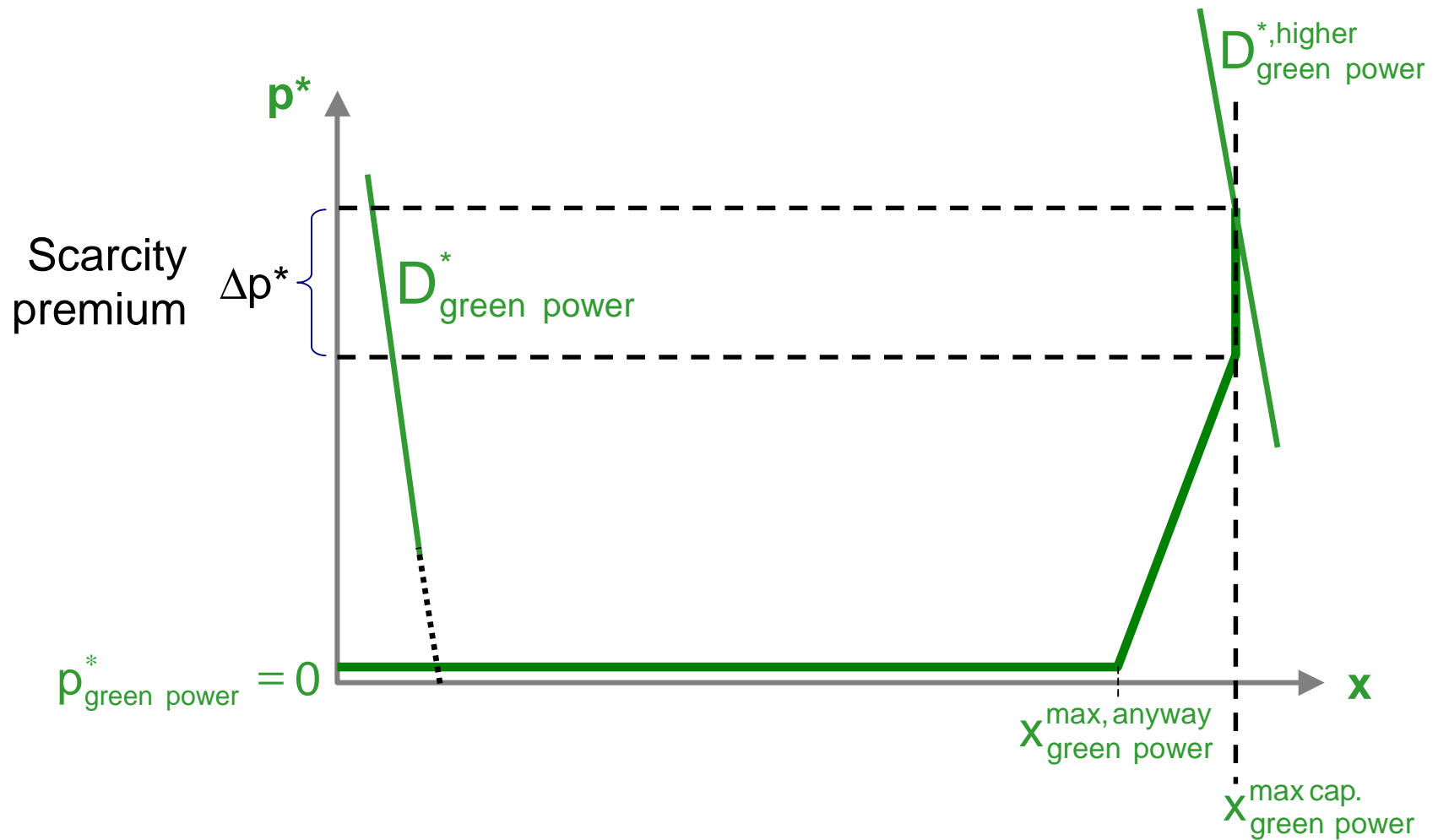
- “Consumer protection” *Only subjective*
- “Stimulate sustainable generation” *Requirement*
- “Market competitiveness” *?*



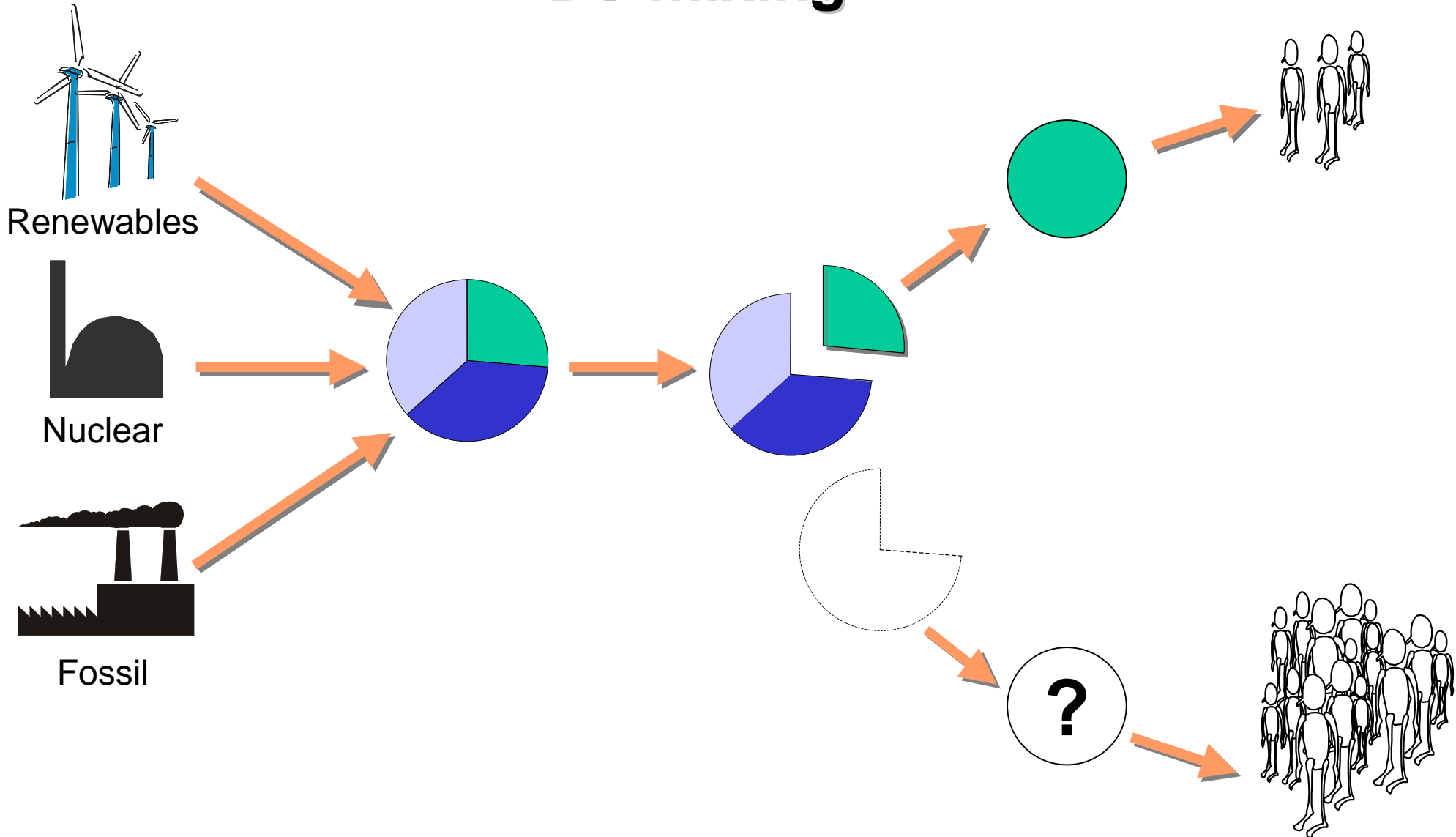
# Markets for power and green power (hypothetically separate)



# Market for additional property „green“



# De-mixing



# Labelling $\Rightarrow$ Transparency $\Rightarrow$ Competition $\uparrow$

?

?

**Standardisation**

**Classification**

**Obligation**

Required for comparability

Required to reduce complex information

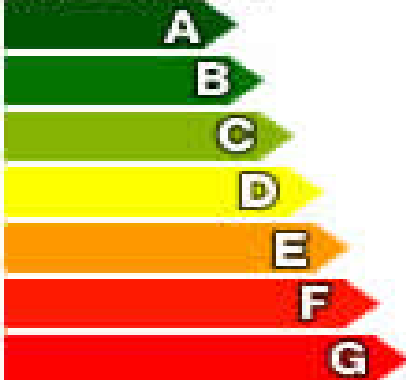
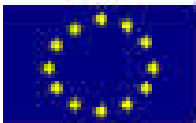
Required, even if negative information is to be shown

+

+/-

+

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# State setting quality criteria

- Who can show good figures?
- Who needs to improve?
- Who is better on something else?

# Result

## Linking method: equal quantities

Risk:

- Impact: none
- Consumer protection: none
- Benefitting: incumbents

# Claims

- Own class for dedicated renewable extension projects
- Prevent de-mixing through entire commercial chain, except for that class
- Reserve expression “green” to that class
- Consider impact of quality setting on newcomers vs. incumbents



# Comment

- Seeming democratic legitimation
- Overcoming a particularity

# Contact

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