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# Energy efficiency policies for washing machines: market monitoring can help Europe do better

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**Topten International Services**

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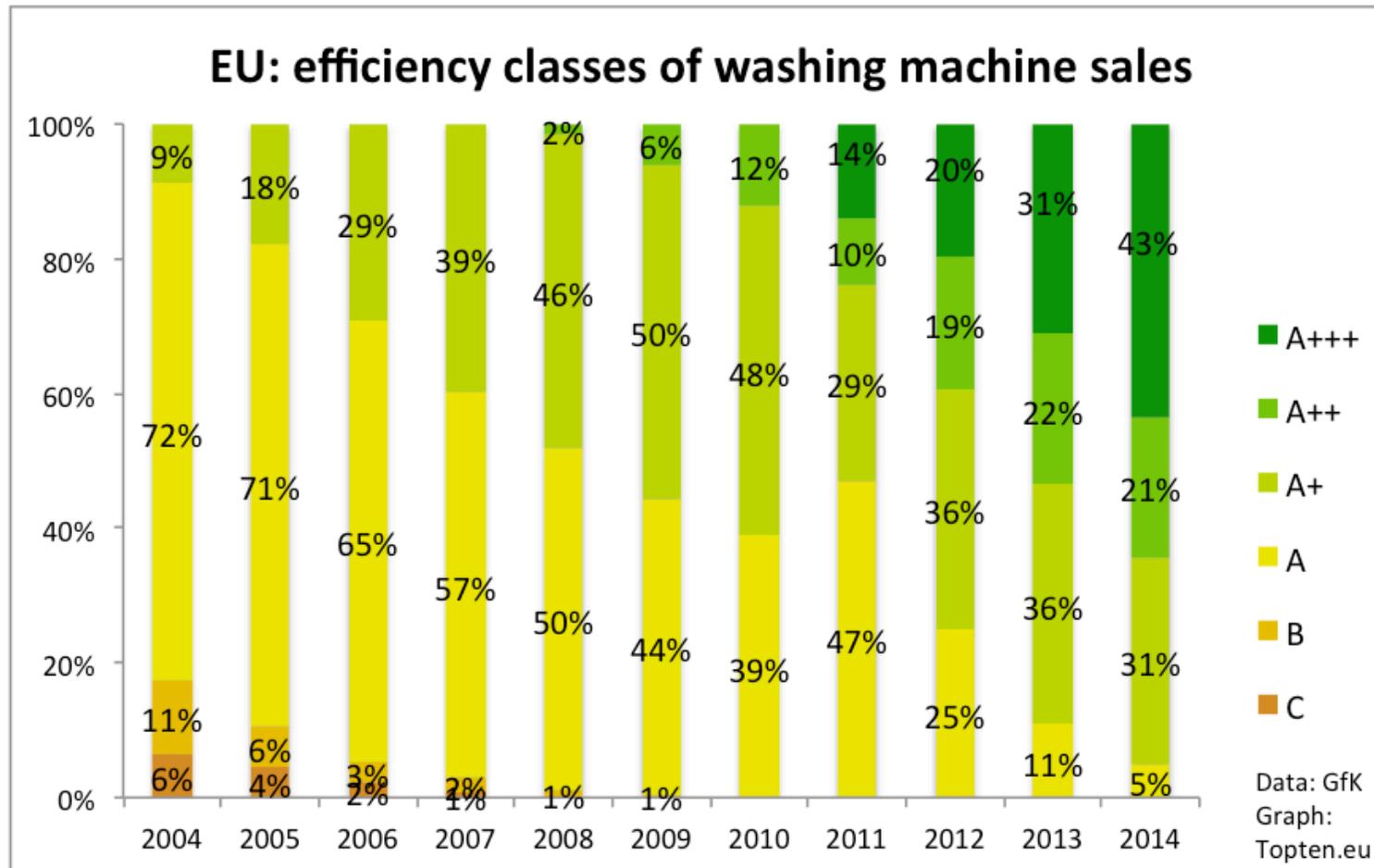
compare

Brand	V-ZUG	V-ZUG	Bosch	Siemens	Bauknecht	Electrolux	V-ZUG	Miele	Bauknecht
Model	Adora SLQ-WP	Adora SLQ	WAY32741CH	WM16Y791CH	WAE 87481	WASL2E	Adora SL	WMF 100-20 re	WAE 88681
Other models			WAY32841CH	WM16Y891CH				WMF / WKF / WKH / WMH 100xx // WMF / WKJ / WMM / WMH 120/130/160/260/270	Whirlpool AWC 8040
Costs for electricity and water (€/15 years)	682	800	812	812	860	848	857	860	857
Capacity (kg)	8	8	8	8	8	8	8	8	8
Energy efficiency class	A+++	A+++	A+++	A+++	A+++	A+++	A+++	A+++	A+++
Energy Efficiency Index	22.8	31.7	32	32	33.7	34.3	36	36.4	37
Spin-drying class	A	A	A	A	A	A	A	A	A
Energy (kWh/year)	98	136	137	137	156	152	155	156	155
Energy (kWh/cycle) 60 / 60 <sub>1/2</sub> / 40 <sub>1/2</sub>	0.52 / 0.41 / 0.36	0.78 / 0.62 / 0.37	0.77 / 0.54 / 0.47	0.77 / 0.54 / 0.47	0.7 / 0.65 / 0.58	0.87 / 0.57 / 0.45	0.94 / 0.67 / 0.37	0.8 / 0.72 / 0.54	0.82 / 0.64 / 0.5
Water (litres/year)	9'800	9'900	10'120	10'120	9'900	9'899	9'900	9'900	9'900
Programme time (min) 60 / 60 <sub>1/2</sub> / 40 <sub>1/2</sub>	190 / 180 / 180	225 / 220 / 215	210 / 195 / 195	210 / 195 / 195	240 / 180 / 180	220 / 184 / 179	210 / 190 / 190	179 / 179 / 179	240 / 210 / 210
Left-on/off (W)	0	0	0.1 / 0.1	0.1 / 0.1	2.32 / 0.11	1 / 0.05	0	3.0 / 0.1	0.16 / 0.16
Max. spin speed (rpm)	1'600	1'600	1'600	1'600	1'400	1'600	1'600	1'600	1'600
Cold wash	yes	yes	yes	yes	yes	yes	yes	yes	yes
Hot/Rain water supply	no / option	option / option	no / no	no / no	yes / no	no / no	option / option	no / no	yes / no
Countries available	on demand	on demand	on demand	on demand	on demand	on demand	on demand	on demand	on demand

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# What Topten does: market monitoring



**Market monitoring is NOT market surveillance**

# Some Topten market monitoring studies

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2014 **TVs** market monitoring study

2014 discussion paper on **product registration and market monitoring.**



2015 market monitoring of **washing machines, refrigerators and tumble driers.**

- EU, France and Portugal

- 2004 – 2014

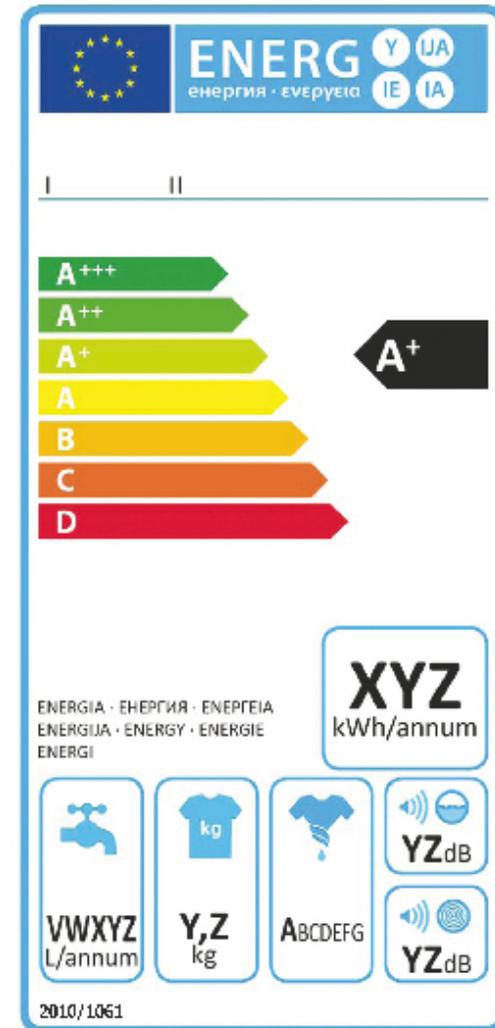
- Based on data from GfK: sales, energy efficiency, energy consumption, energy class, price, capacity.

- Support of ADEME and WWF Switzerland.



# Why bothering monitoring markets?

- Energy efficiency policies in EU currently based on incomplete, outdated, not comparable data.
- Systematic market monitoring would support policy design and evaluation:
  - Setting of MEPS & labels thresholds.
  - Good timing of revisions
  - Evaluating impact
- **Our studies show the value of market monitoring.**

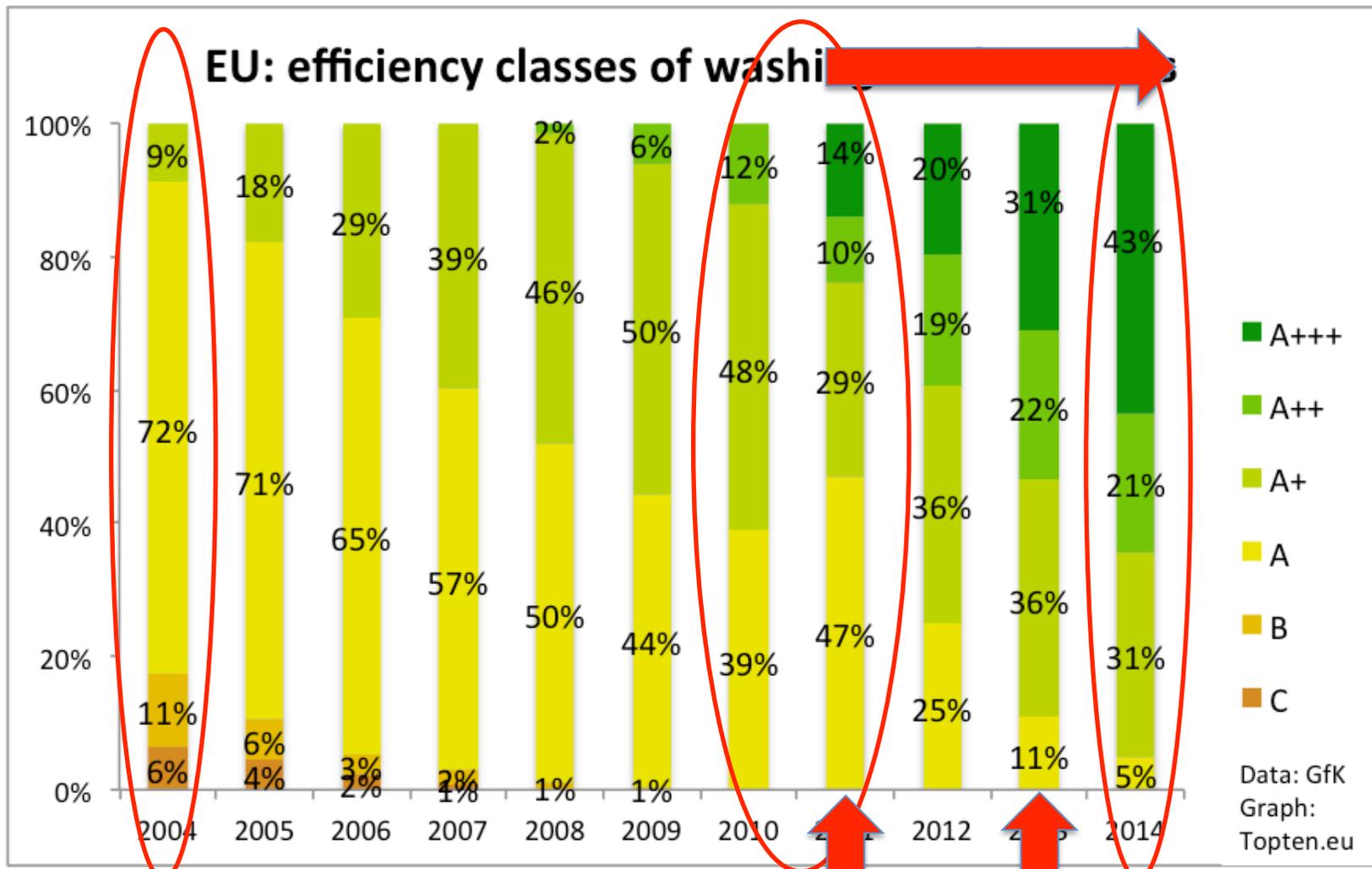


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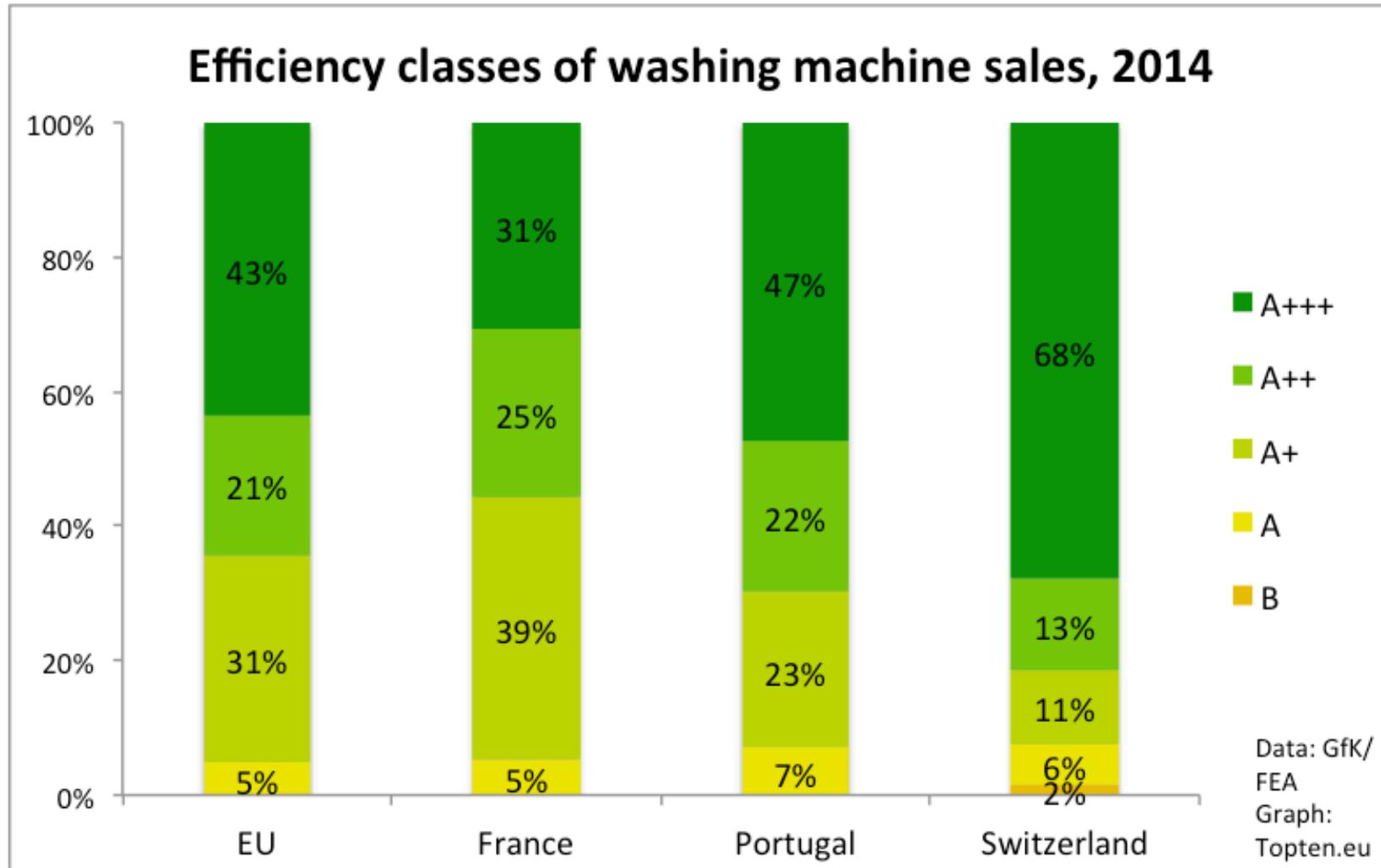
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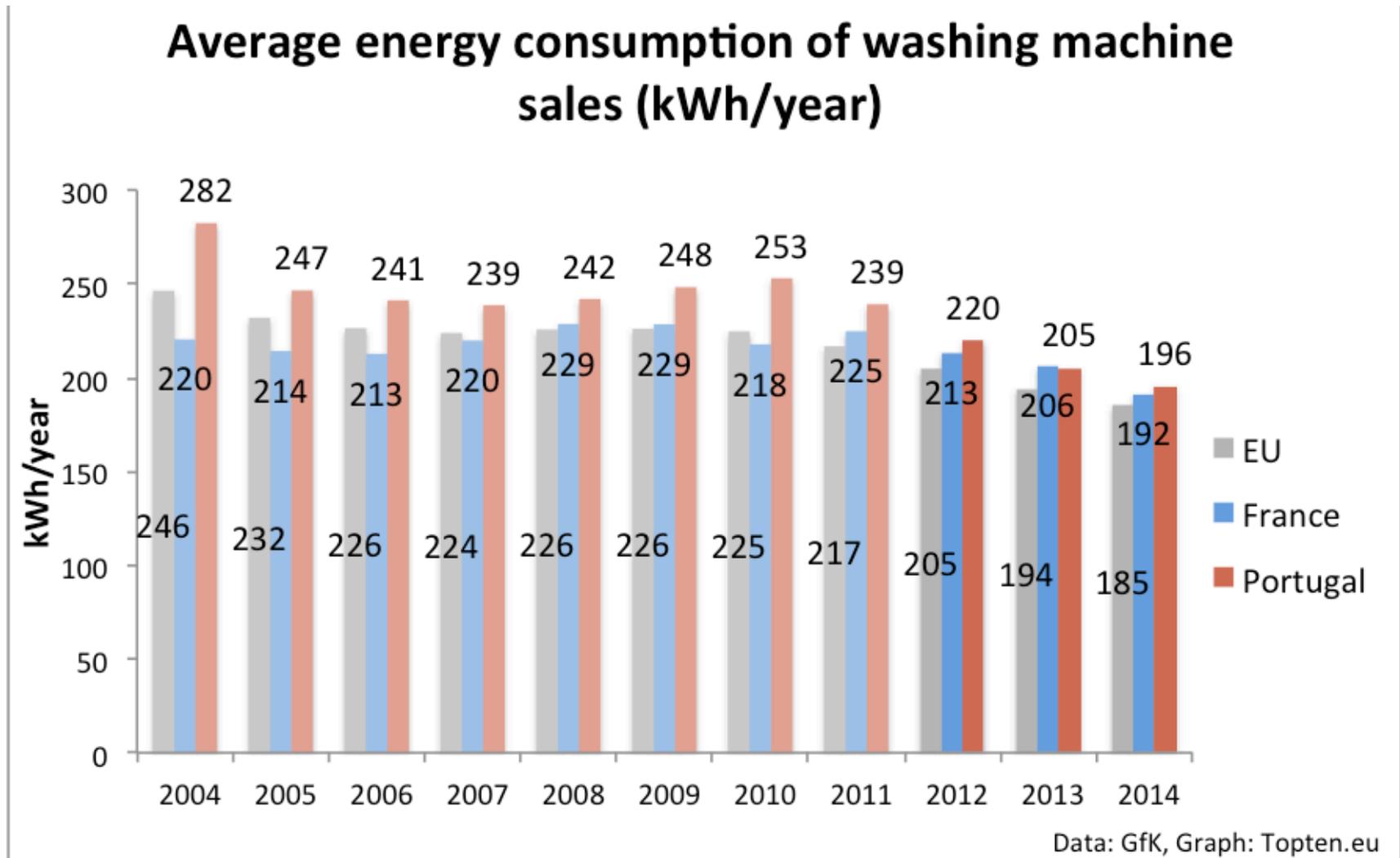
# 43% machines sold in EU in 2014 were A+++



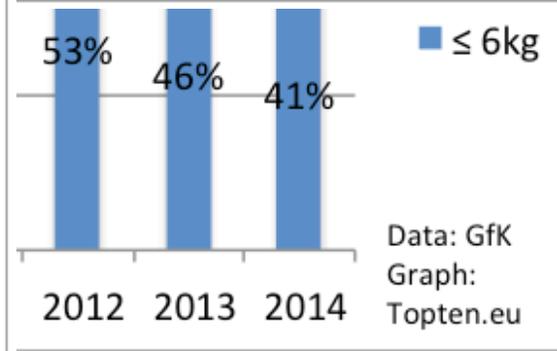
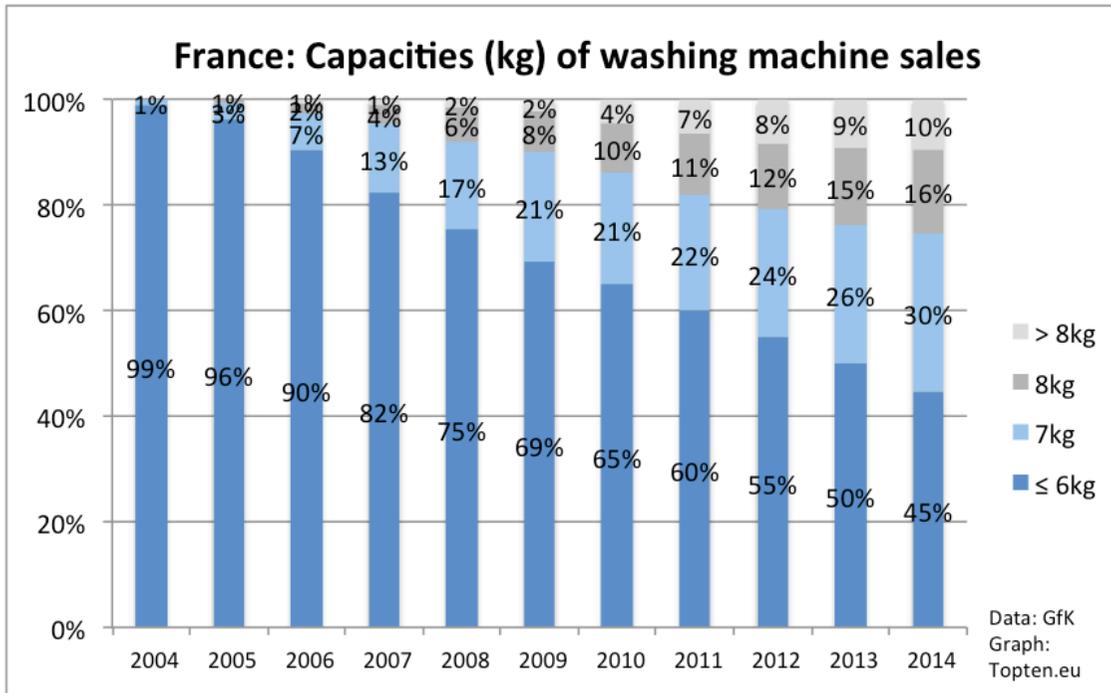
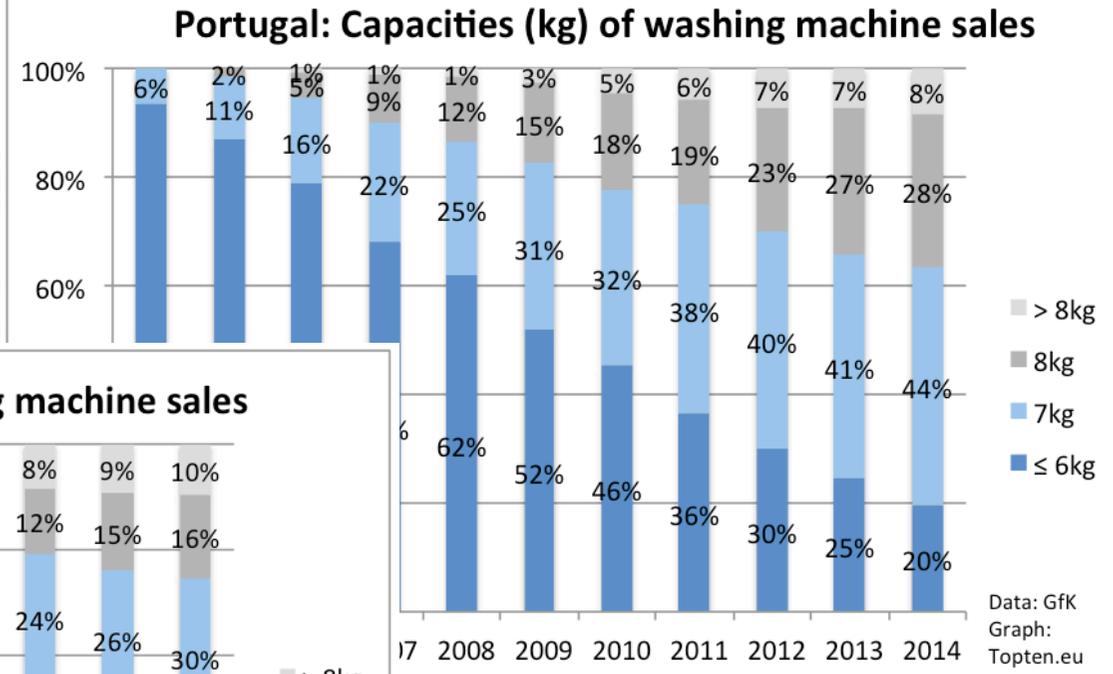
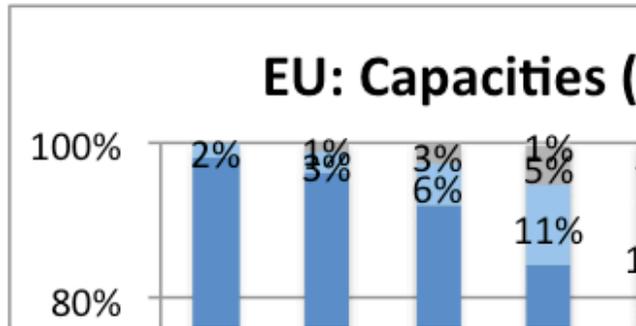
# Large differences between national markets



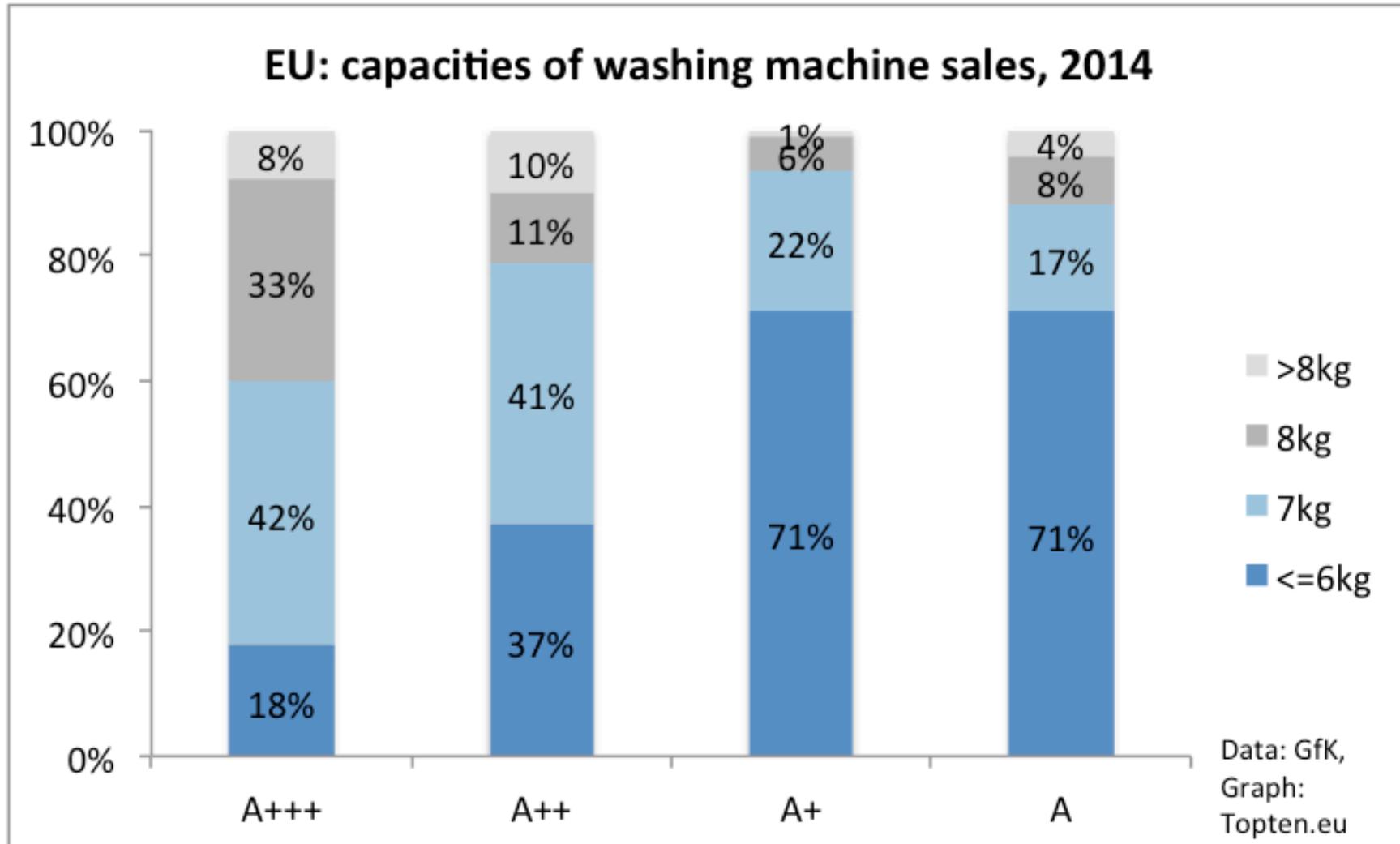
# Decline in energy consumption after 2010



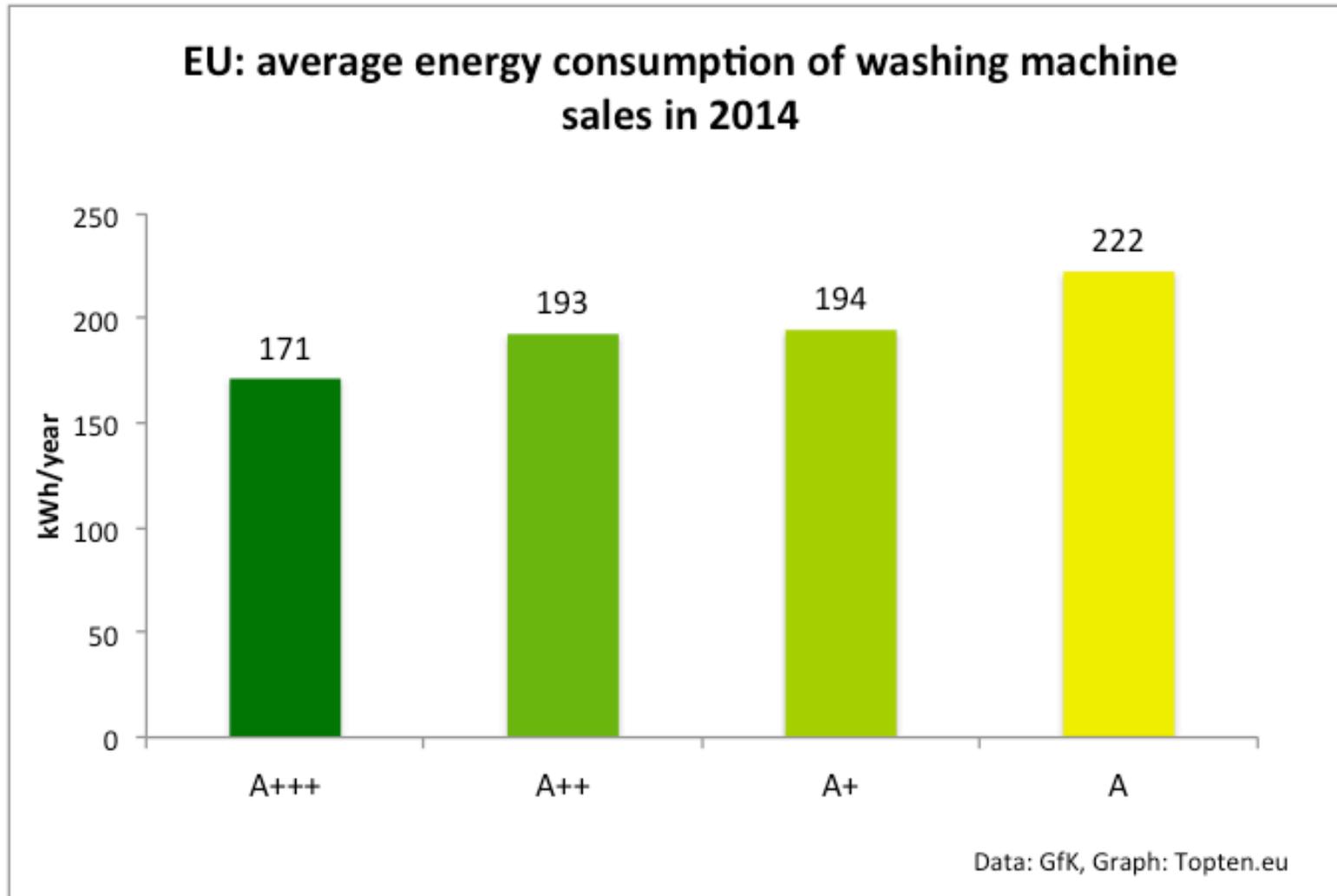
# Strong trend to larger washing machines



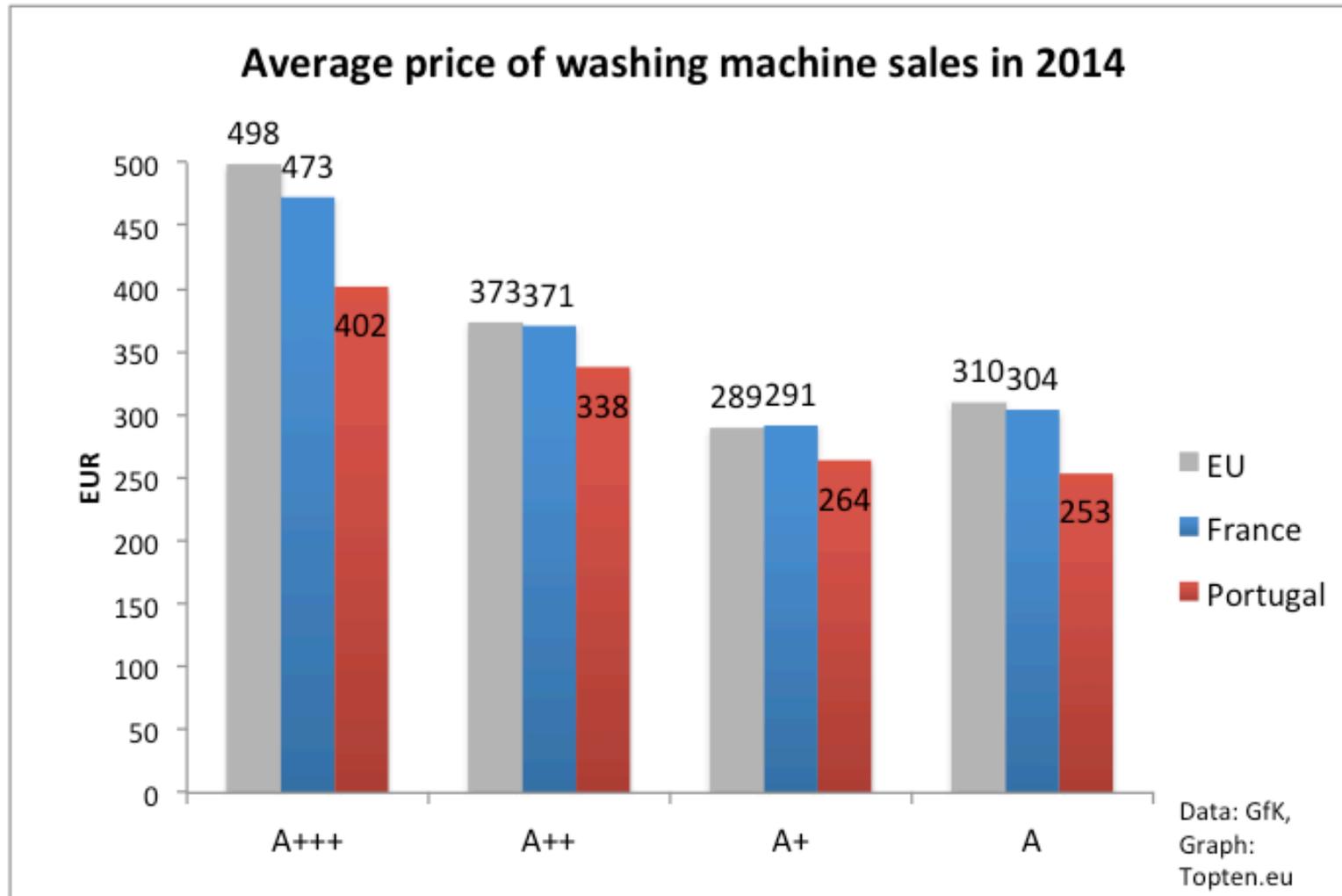
# Most efficient machines are also the largest



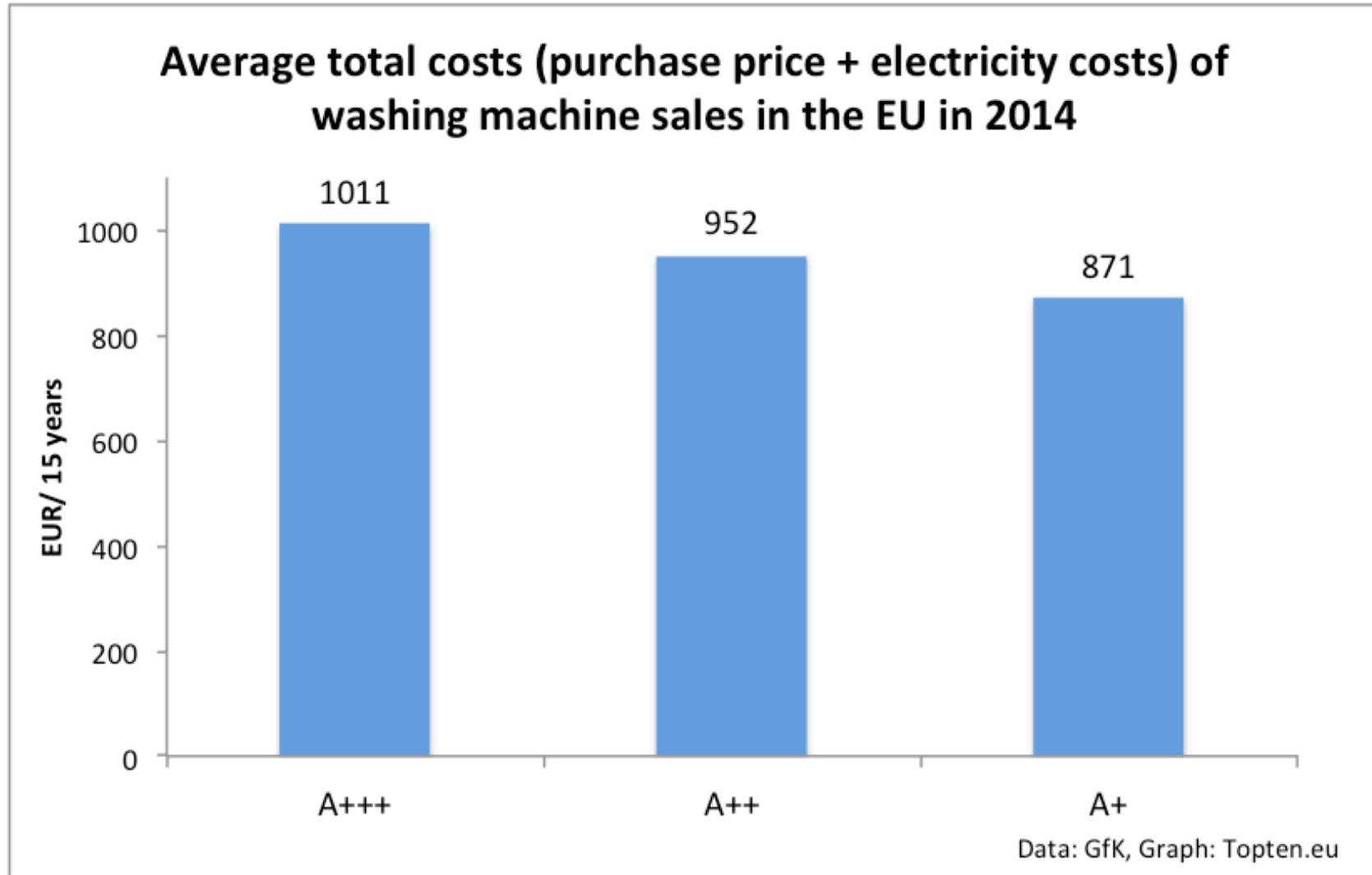
# Higher efficiency = lower consumption?



# Higher prices for efficient (and large) machines



# Most efficient machines not cost-effective



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# Conclusions

- The energy label can have an important impact on the market (e.g. 2012-2014). Often times it does not.
- Better market data enables more effective regulations:
  - More ambitious thresholds for MEPS and label classes.
  - Timely revision of regulations.
  - Evaluate the impact of policies.
- The increase in washing machine capacity is neglecting some of the potential energy savings.

# Recommendations

## Revision of washing machines regulations:

- A to G scale with empty top classes
- An EEI formula that stops the incentive for large machines
- Include energy and washing performance requirements for 20°C programme (cold wash)

## Introduce a systematic market monitoring:

- Mandatory product registration and public database.
- Additionally: recent, exhaustive, aggregated sales data
- Annual reports.

# Thank you for your attention

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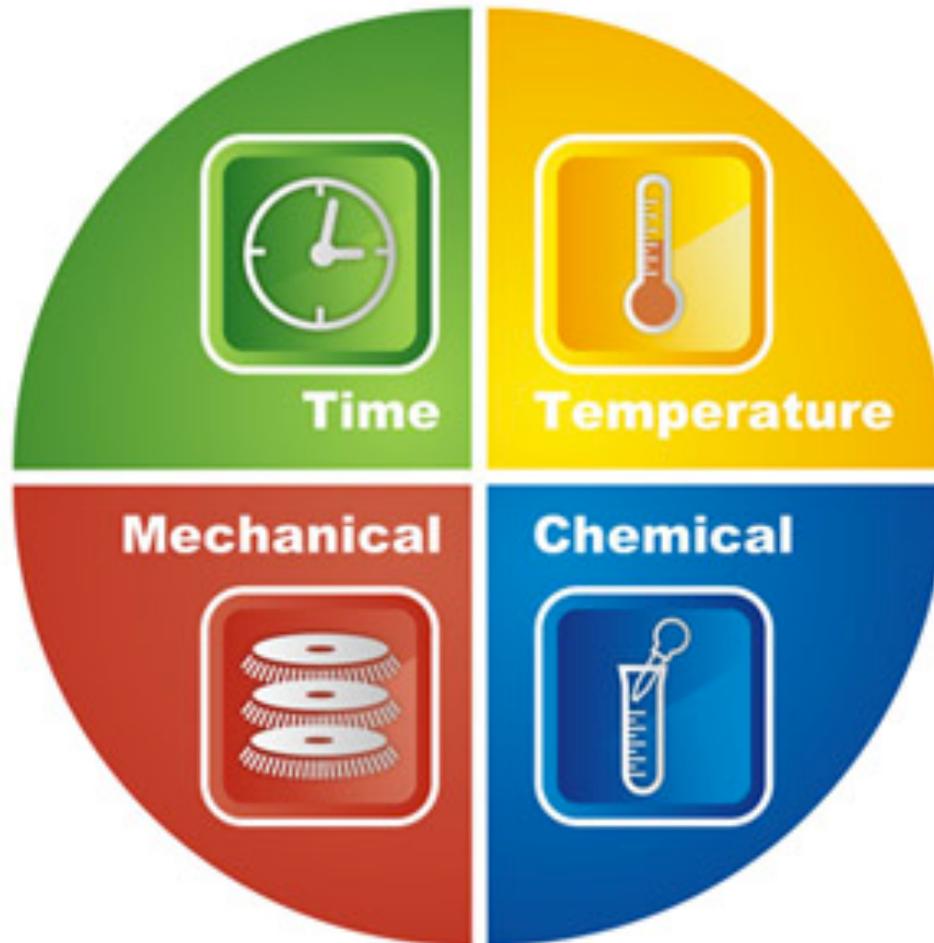


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# Sinner Circle

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- Four factors influence the washing final result



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