A new stock model for labelled home appliances

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Stock assessment is key to better regulation
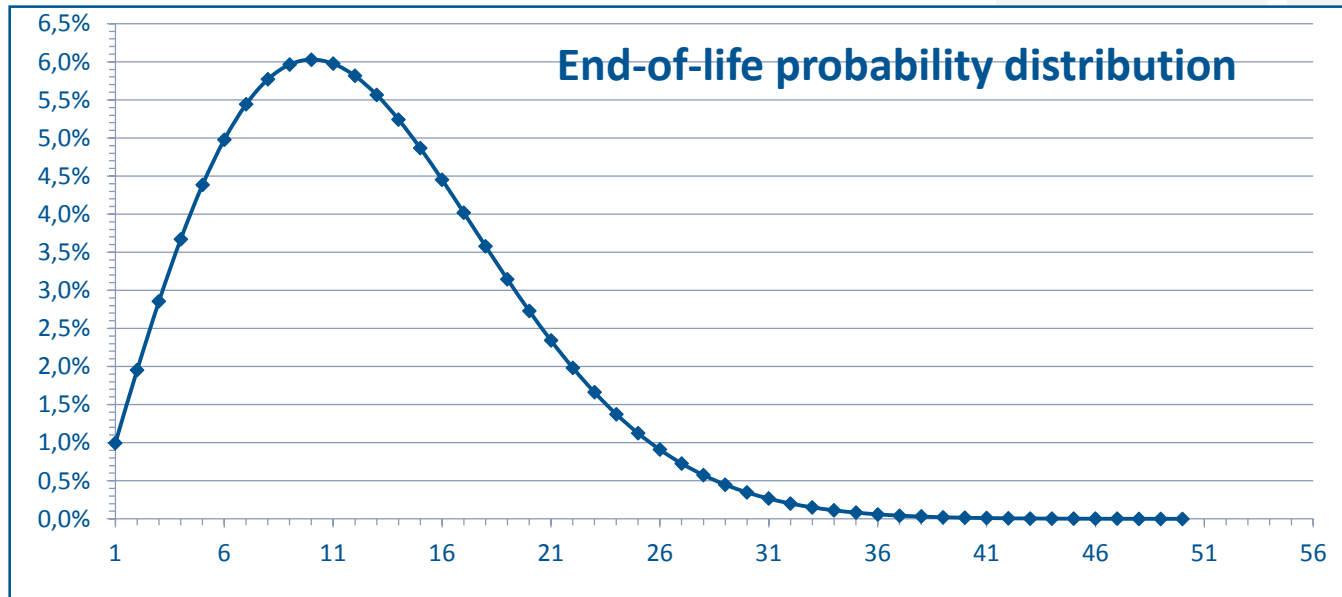
- Application of the "energy efficiency first" concept

- Take stock of energy savings potential

- Deliver real societal benefits

The concept

From a model for end-of-life probability distribution

- For the WEEE Directive the probability an appliance becomes a waste is crucial…

End-of-life probability distribution

To a model for life-span probability distribution

- … but knowing what becomes a waste …
  … it is easy to find what remains in consumer homes
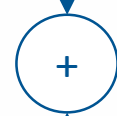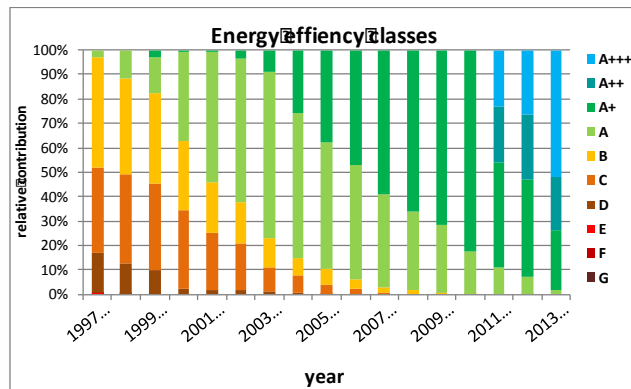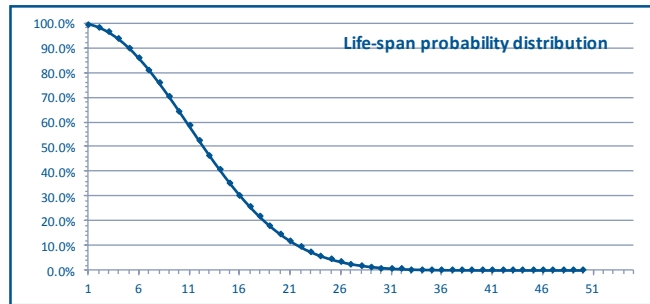
Life-span probability distribution
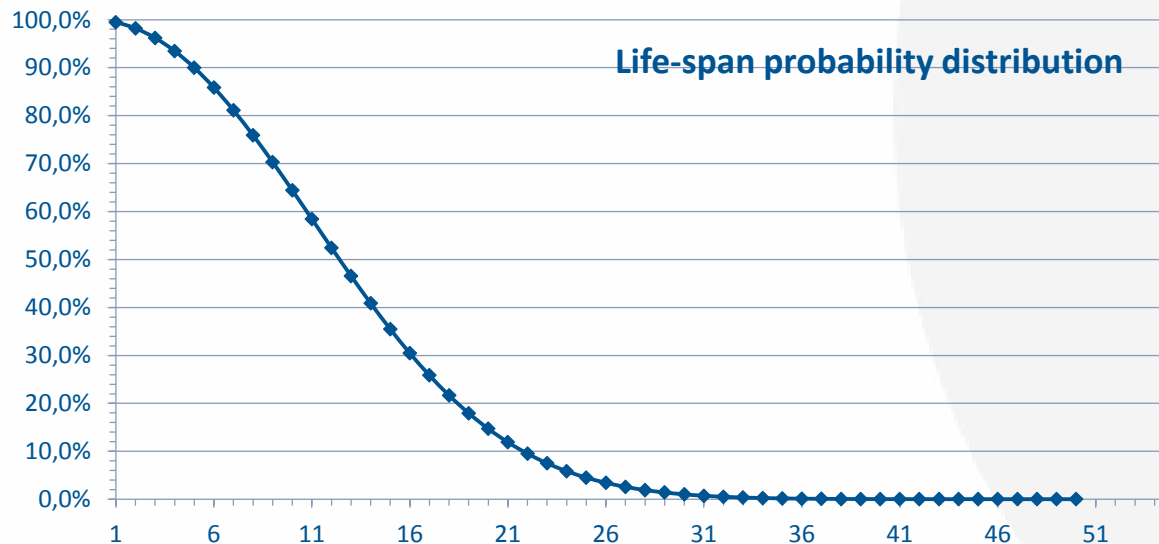
Sales data shape future installed stock

- Sales data represents the change to the installed stock
  - per year and per energy class

CECED own data, for illustrative purposes

Energy effiency classes

relative contribution / year

Legend: A+++, A++, A+, A, B, C, D, E, F, G
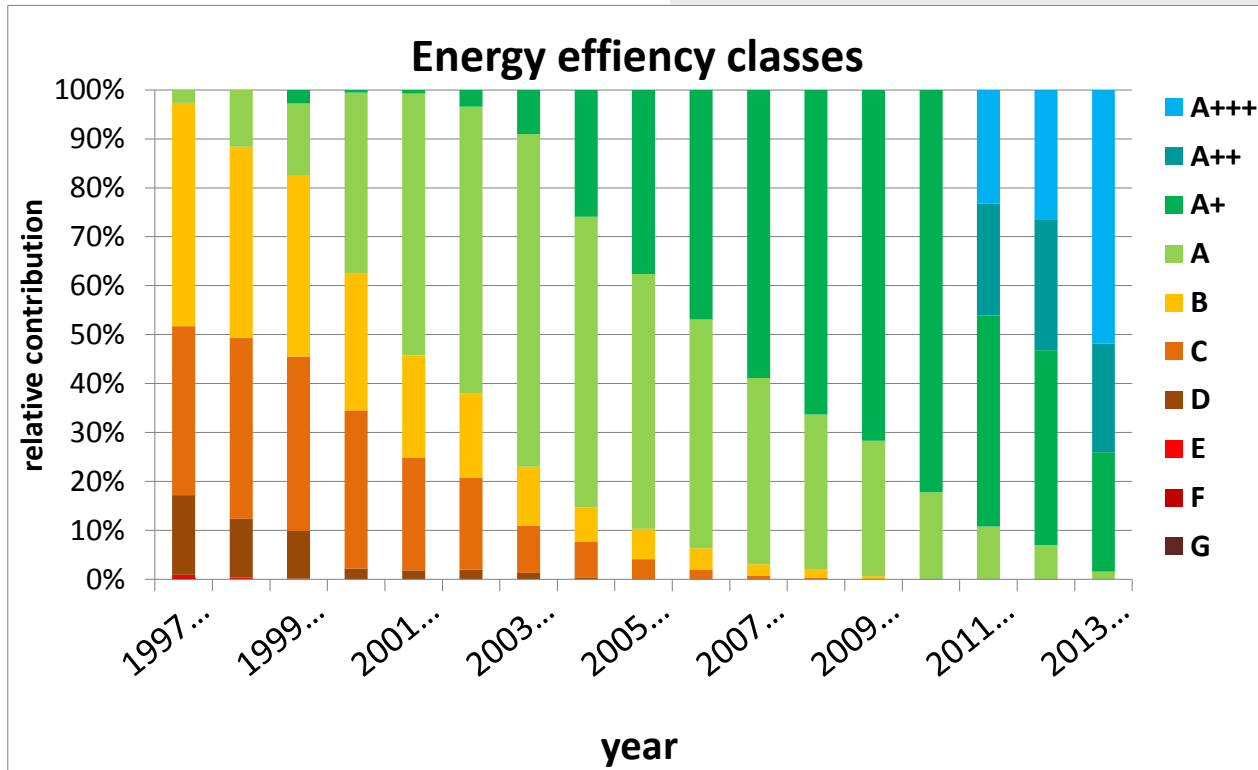
Combining life-span and sales data, it is possible to come to the installed stock

The preliminary result

Stock assessment in Italy for washing machines
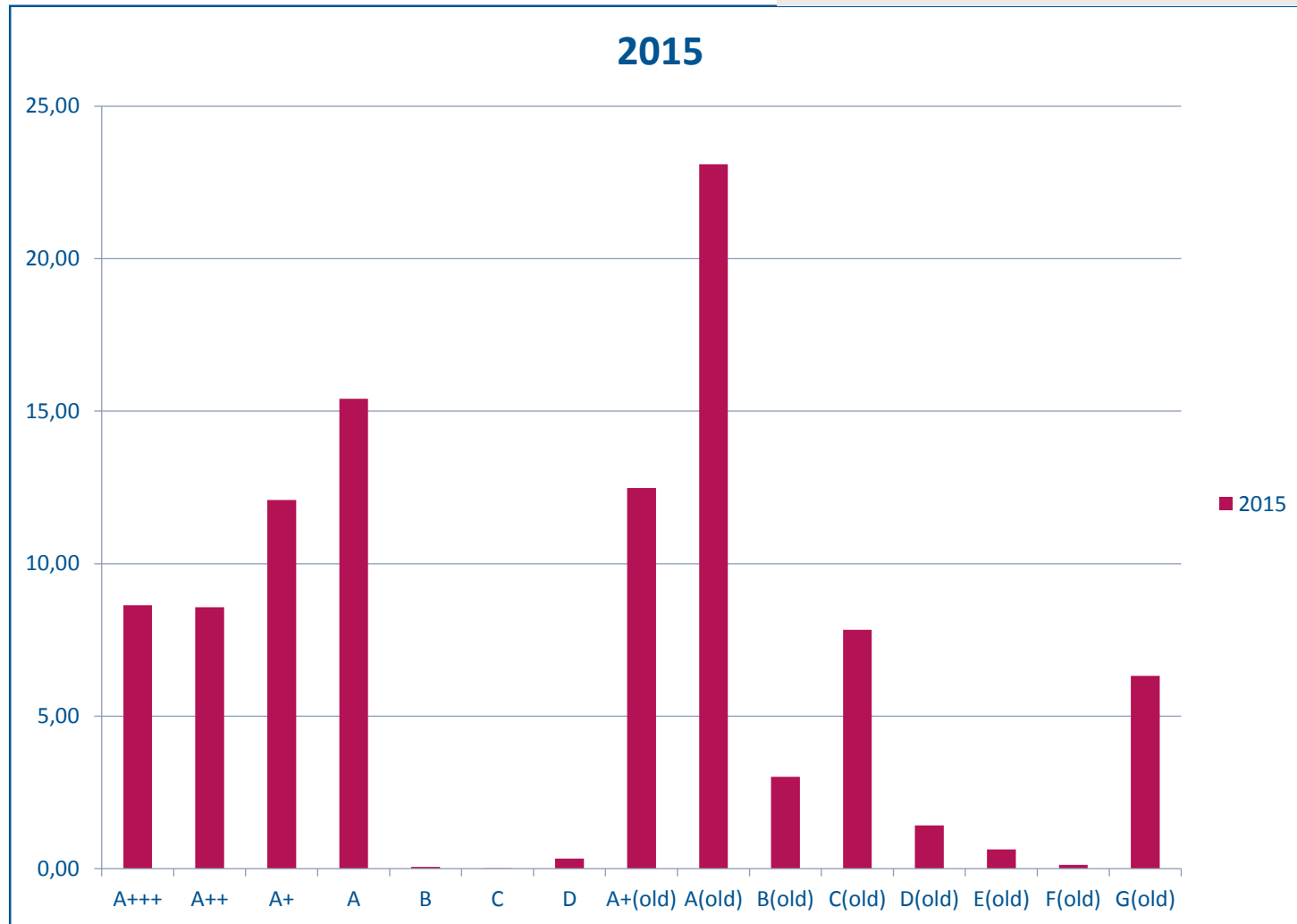
Stock assessment, preliminary conclusion

- The model looks reliable, being able to account for about 98% of the installed stock quantity;

- Given the long tail of the in-house distribution curve, a long series of sales data is needed;

- More countries to be analysed to assess the geographical variation in the installed stock composition;

- Policy should assess the benefit of replacing old and inefficient installed stock with today's highly energy efficient technologies, not only looking at the benefit in energy saving but looking at the overall life-cycle impact;

- That would give a positive spin to innovation;

- That would enable the sector to give a positive contribution to the economy, environment and society.

Thank you

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